infotec Launch Guide

IS2235 & IS2245

infotec e@si

CONTENTS

Page

OVERVIEW 7
- Product Appearance 7

NEW FEATURE SUMMARY 8

TARGET MARKETS 11
- Who would benefit from the I2235/2245 11

PRODUCT STRENGTHS & FEATURES 12
- Productivity 12
- Finishing Options 12
- Versatile Scanning Solutions 12
  - Network TWAIN Scan 12
  - Scan to E-mail 13
  - Scan to Folder 13
  - Scan to NCP 15
  - Scan to URL 15
- Versatile Network Connectivity 15
- Enhanced Printing Functions 16
  - Sample & Locked Print 17
  - Hold Print 17
  - Stored Print 17
  - Mask Type for Copying 18
  - Data Security for Copying 18
  - PDF Direct Print 19
  - Printing in Non-Windows Environments 19
  - Printing on the UNIX/Linux Platform 19
  - Printing with CUPS 21
  - Printing in the SAP/R3 Environment 22
  - Novell NDPS Gateway 23
  - Printing on Citrix Metaframe 24
- Advanced Faxing Functions 26
  - High Speed G3 Fax 26
  - Multi-Port 26
  - Internet Fax 26
  - Paperless / Server-less Fax 27
  - Forwarding inbound Faxes to E-mail 28
  - Forwarding inbound Faxes to Folder 28
  - Email Notification of Inbound Fax to Folder 29
  - Forwarding of Fax Transmission Results to E-mail 29
  - Fax Number search using LDAP 29
  - LAN Fax 30
  - IP-FAX (T.38) 30
- Document Server 31
  - Max No. A4 pages that can be stored 31
  - Capacity of the Document Server 31
- Web Image Monitor 32
- Security 33
  - The Need for Security 33
  - Authentication 33
  - Encryption 36
  - HDD Data Protection 37
  - DataOverwiteSecurity Unit 37
  - Document Server Security 38
  - Scan Security 38

SERVICE FACTORS 39
- Target Reliability 39
- OEM Equivalents 39

CONFIGURATION & PART NO.S 40
- Option Correlations 43

PRODUCT SPECIFICATIONS 45
- Mainframe Specification 45
- Copier Specification 46
- Productivity Data 47

PERIPHERAL SPECIFICATIONS 48
- ARDF – DF82 48
- Paper Bank – PS530 48
- LCT – RT45 48
- Bridge Unit – Type 2045 49
- 1 Bin Tray – PT280 49
- 1000 Sheet Finisher – SR790 49
- Booklet Finisher – SR890 50
- Multi-Tray Finisher – SR880 51
- Scanner Accessibility Option – Type 3245 52
- Printer Specification 53
  - Printer Driver Features 55
  - Supported Environments 56
- Scanner Specification 59
  - Scan to E-mail 60
  - Scan to Folder 61
  - Network TWAIN Driver 62
- Fax Specification 63
  - Transmission Specification 65
  - Reception Specification 65
  - Internet Fax Basic Specification 66
  - LAN Fax Basic Specification 67
  - IP-Fax Specification 67

ENVIRONMENTAL SPECIFICATIONS 68

PART NO.S & MACHINE COMPATIBILITY 70

IS 2235 - 2245

Versatile Document Server Functions, Advanced Security Features

- **35ppm and 45ppm**
- **Booklet Finishing**
- **Scan to Email / Folder**
- **Scan to URL / NCP**
- **Internet Fax**
- **Inbound Fax Forwarding**
- **PDF Direct Print**
- **Web Image Monitor**
- **Windows Authentication**
- **Data Overwrite Security**

OVERVIEW

The IS 2235 and IS 2245 are highly featured B&W document server MFPs that directly replace the IS 2135 and IS 2145 at the same speeds.

The IS 2235 and IS 2245 multifunctional devices provide added value to end users, retaining strong features from their predecessors:

- Scan to Email
- Scan to Folder
- Internet Fax
- Forwarding inbound faxes to e-mail
- LDAP Support
- Web Image Monitor.

Product Appearance

NEW FEATURE SUMMARY

The IS 2235 and IS 2245 come with a host of new features, greatly improving the functionality of our MFP offering. Added to that, in response to the market's increased need for security of printed and scanned documents, IS2235/45 incorporates new security features to satisfy both Government and major account sectors, especially in Finance, Legal and Insurance.

Scan to URL

Scanned images can be stored for viewing or downloading via the Web, thus improving network productivity by reducing network traffic. Another major benefit would be the sharing of information, especially of "heavy" files.

Scan to NCP (Netware)

Scan to NCP will enable us to capture users in Novell network environments. Users will be able to send up to 2GB of documents, thereby improving information sharing.

On Demand & Auto Email Notification

Alerts on the status of machines will be notified to the IT manager automatically and remotely via e-mail. This allows the IT manager to efficiently manage the machine without the need to open web tools.

Inbound Fax to Folder with Email Notification

Users or fax administrators can be notified by email as soon as inbound faxes are forwarded to designated folders, thus improving fax management, as well as security. No documents are left lying in the MFP and the information is not routed through SMTP servers. This flexible feature also allows for faxes from specific numbers to be forwarded to designated folders in the PC.

ID Folders

New features such as Hold & Stored Print improve the useability, functionality and security of ID Folders. This is especially important in Major Accounts where this feature can replace the need for a physical mailbox.

IP Fax

IP Fax reduces communications costs, and improves the total cost of ownership of fax workflow. The new fax confirmation feature greatly enhances productivity by allowing users to send and receive faxes from the IS2235/45 to an IP fax machine which is directly connected to the same network using TCP/IP.

Fax Address Search via LDAP

Improve manageability of document distribution with quick and easy searching for addresses in the address book, either by fax number or e-mail address.

Advanced Security Features

Improved DataOverwriteSecurity Option

With the introduction of the DOS Type D unit on the IS 2235 / 45, it is now possible to overwrite temporary data from the scanner and document server functions.

Windows / LDAP Authentication

Authentication eliminates unauthorised use of and access to the machine, and strengthens security management of data. By providing a solution that enables customers to use their current Windows network User Name and Password, we can seamlessly and securely integrate into their network environments. Windows Authentication eliminates “From” field spoofing which is the main cause of virus infections.

Encryption

Encryption prevents data theft or falsification during transmission.

Unauthorised Copy Control Features

This feature eliminates the risk of unauthorised copying of printed documents of a sensitive nature. For major account and government agencies, this is a key security solution for confidential printed materials.

Mask Type for Copying

With this feature, documents are printed with an embedded message (which can be input from the printer driver). If you then try to copy or scan the document, a masking pattern with the embedded message will appear on the copy.

Data Security for Copying

With the optional Copy Data Security Unit, a special marking pattern is embedded in the printed document. If you try to copy the document, the machine will detect the special marking pattern and grey out the copy.

European Special Characters and Symbols New!

With the introduction of the IS 2235 and IS 2245, European special characters and symbols are supported from the Operation Panel. The supported languages are French, German, Italian, Spanish, Dutch, Norwegian, Danish, Swedish, Portuguese, Finnish, Polish, Hungarian, Czech and Russian.

User Benefits

- Support for user names/passwords using European special characters/symbols
- Access to shared folders and servers using European special characters/symbols
- Documents can be named using European characters
- Alerts, notifications, Scan to Email etc. sent from the MFP can contain European characters in the Email body/subject

Supported special characters/symbols

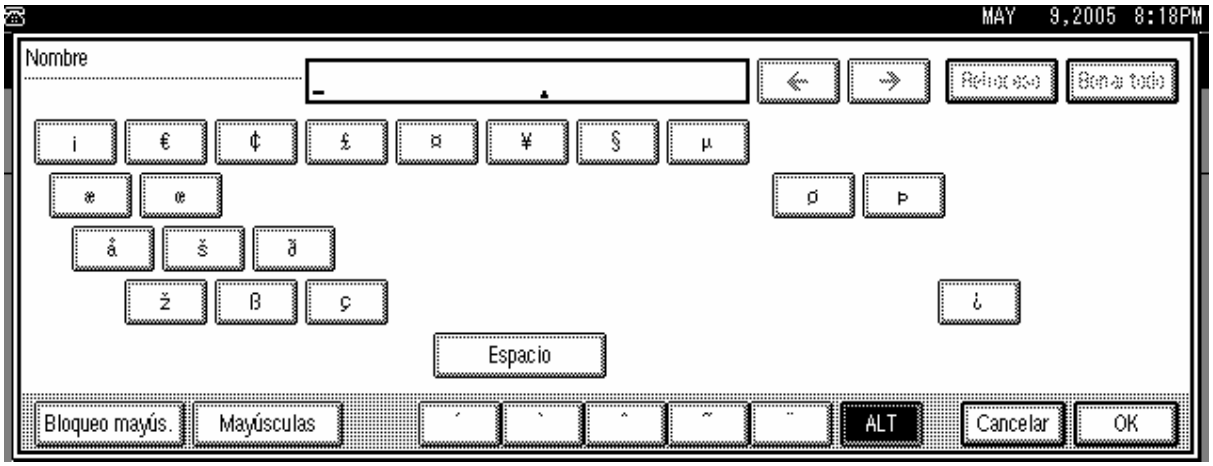
French, German, Italian, Spanish, Dutch, Norwegian, Danish, Swedish, Portuguese, Finnish>

€	Š	Œ	Ž										
š	œ	ž	Ÿ										
¡	¢	£	¤	¥	§								
µ	¿												
À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í
Ð	Ñ	Ò	Ó	Ô	Õ	Ö	Ø	Ù	Ú	Û	Ü	Ý	Þ
à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í
ð	ñ	ò	ó	ô	õ	ö	ø	ù	ú	û	ü	ý	þ

<Polish, Hungalian, Czech>

€	Š	Ś	Ť	Ž	Ź							
š	ś	ť	ž	ź								
Ł	¤	Ą	Ş	Ş	Ż							
ł	µ	ą	ş	Ľ	ľ	ż						
Ŕ	Á	Â	Ă	Ä	Ĺ	Ć	Ç	Č	É	Ę	Ë	Ě	Í
Đ	Ń	Ň	Ó	Ô	Ő	Ö	×	Ř	Ů	Ú	Ű	Ü	Ý
ŕ	á	â	ă	ä	Í	ć	ç	č	é	ę	ë	ě	í
đ	ń	ň	ó	ô	ő	ö	÷	ř	ů	ú	ű	ü	ý

Spanish Example of the Operation Panel



TARGET MARKETS

Who would benefit from the IS 2235 and IS 2245?

1. Small to Mid Sized Workgroups (3-30 workers)

The primary target for the IS2235 and IS 2245 is small to mid sized workgroups in the General Office where the most likely needs would be for basic features, finishing, Document Server functions, scan to e-mail and scan to folder.

2. Mid-Large Workgroups (20-100 workers)

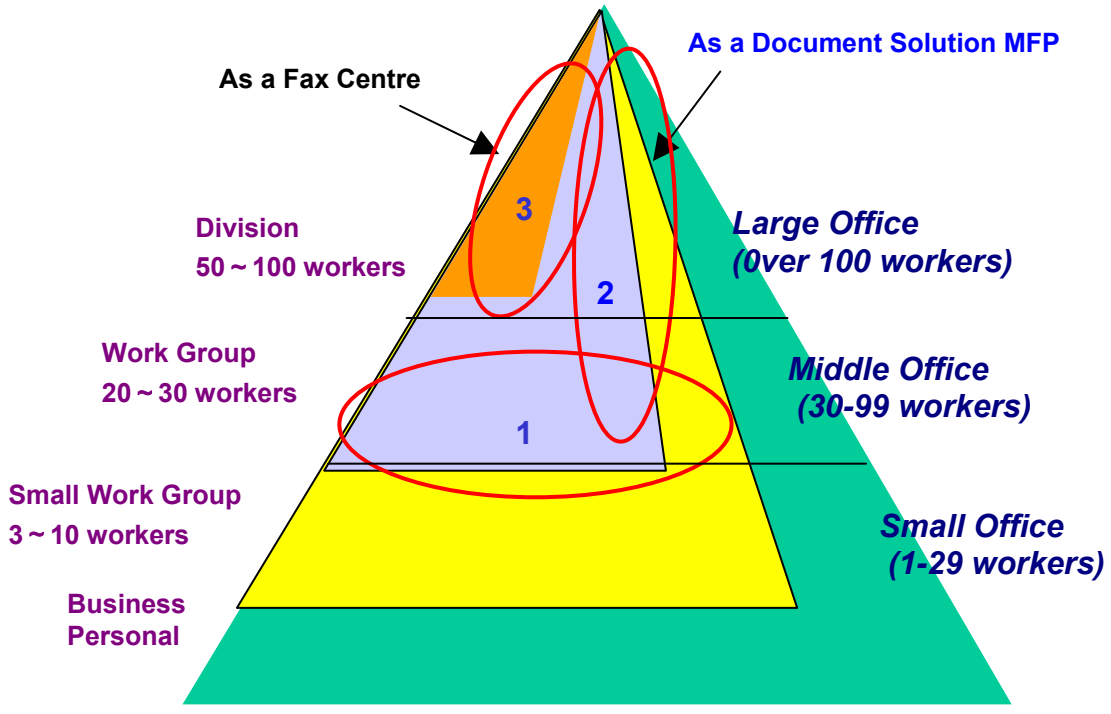
The secondary target for the IS 2235 and IS 2245 is in the networked office where these models can be offered as Document Solution MFPs. Typical applications would be:

- Scanning
- "to my e-mail" solutions
- Security
  - Authentication
  - Encryption
  - Copy Protection
- Enhanced Printing

3. Large Workgroups (50-100 workers)

Another important target market for the IS 2235 and IS 2245 is in large accounts where the target would be to replace multiple conventional faxes. These users would typically require multi ports, Internet fax and IP fax.

New sectors are also opened to us with the introduction of the new Data Overwrite Security (DOS) unit. This security solution is designed to meet Government, military and major accounts' requirements for document security and access control whilst using digital devices.



PRODUCT STRENGTHS & FEATURES

Productivity

With a first copy speed of just 4.1 seconds from the ADF, the IS 2245's productivity contributes to the efficient running of a busy office. And with duplex speeds the same as simplex, sustained productivity is assured.

	IS 2235	IS 2245
1st Copy Speed from the ARDF		
A4	4.9 seconds	4.1 seconds
A3	6.0 seconds	5.0 seconds
Continuous Speed from the Platen Glass		
A4 Simplex	35ppm	46ppm
A3 Simplex	19ppm	22ppm
A4 Duplex	35ppm	46ppm
A3 Duplex	13ppm	16ppm

Finishing

The IS 2235 and IS 2245 comes with a choice of 4 finishing options:

- 1 bin tray
- 1000 sheet Finisher (SR790), with 3 staple positions (50 sheet staple capacity)
- 2000 Multi Tray Finisher (SR880), with 4 staple positions (50 sheet staple capacity)
- Booklet Maker (SR890), with 4 staple positions
  - 50 sheet staple capacity – stacked
  - 15 sheet staple capacity – booklet

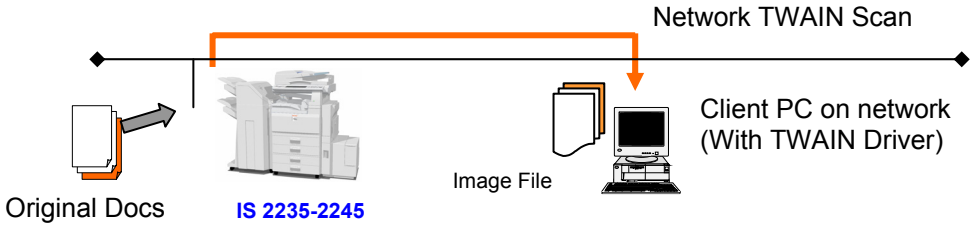
Versatile Scanning Solutions

Distribution of documents via scanner applications is an important part of workflow in networked environments. The IS 2235 and IS 2245 offer a variety of scanning solutions:

- Network TWAIN Scan
- Scan to E-mail
- Scan to Folder
- Scan to URL
- Scan to NCP

Network TWAIN Scan

The Network TWAIN scanner can be used from the computer via network Ethernet (TCP/IP), the IEEE 1394 option or Wireless LAN option. Originals can be read in the same way as for SCSI or USB-connected scanner.



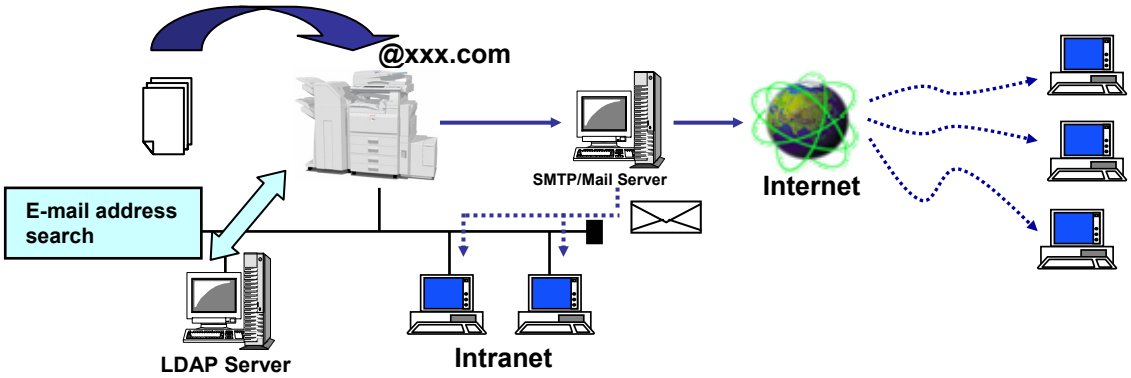
Scan to E-mail

Scan to E-mail has now become a common scanner function in the market, mainly because of cost savings. The Scan to E-mail function of the IS 2235 and IS 2245 does not require a dedicated server or utility software, therefore sales can confidently promote the scanning solution without adding expense to the customer's environment. When using the Scan to E-mail function users can simultaneously store the scanned documents in the Document Server. Another benefit of Scan to E-mail is the customer's ability to access the company's address book via LDAP (5 servers can be registered).

Benefits for Customers

Cost Saving: Reduce transmission cost by sending data over Internet or Intranet.
Easy Operation: Operation of scan to E-mail is almost same as that of fax function.
Security: Supports SMTP authentication and POP before SMTP authentication
Easy maintenance: Direct access to company global address book via LDAP provides an unlimited number of internal e-mail addresses. Or, as another way of looking up e-mail addresses, the address book can be easily managed through Web Image Monitor.
Minimum Investment: No additional software or hardware purchase is necessary.

Scan to E-Mail Flowchart:



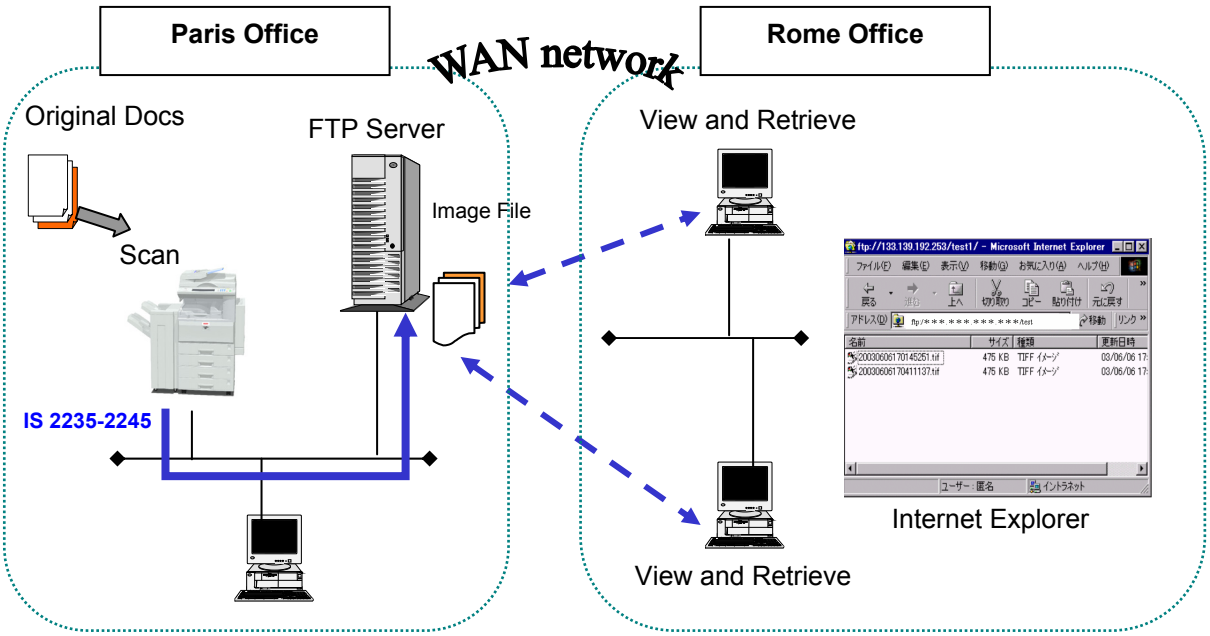
Scan to Folder

IS 2235 /2245 allows users to distribute documents directly from the MFP to client folders on a Client PC or FTP servers on the network - without a document distribution server. 50 folders can be selected per job. Scan to Folder is an excellent document distribution solution for customers who have LAN/WAN network. It improves customer's workflow in network infrastructures via SMB protocol (for Windows only environments) or FTP protocol (for mixed OS network environments). With the IS 2235 / 2245 the NCP protocol is also supported (for Netware environments).

Benefits for Customers of Scan to Folder (Scan to FTP)

1. There is no physical location restriction on users as long as they are in the same LAN/WAN network
2. Users can view and retrieve data from the FTP server in OS mixed networks (Windows, Mac, Linux)

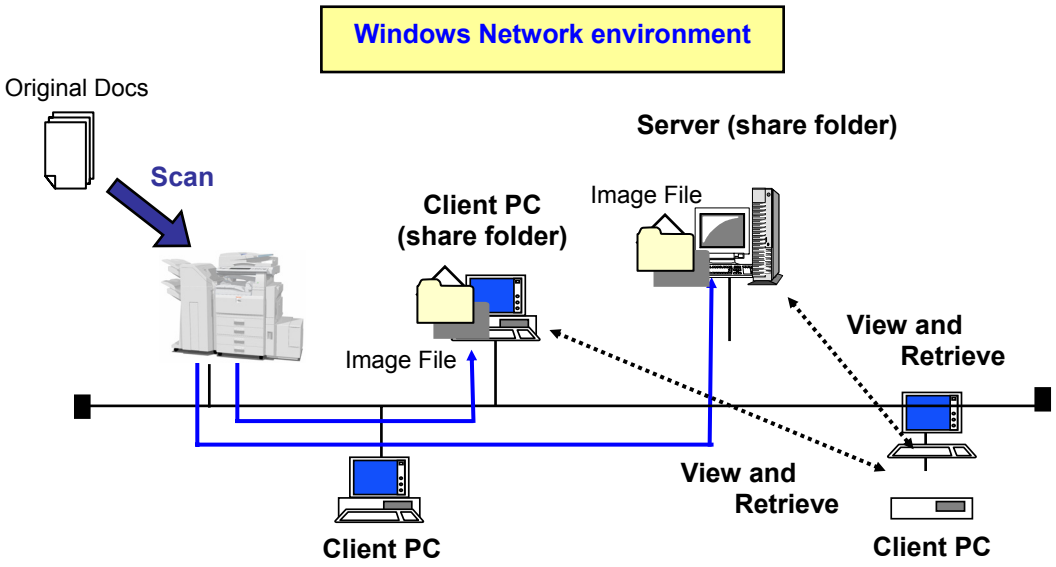
Scan to Folder Flowchart (FTP):



Benefits for Customers of Scan to Folder (Scan to SMB)

1. Data creation from paper documents, and storing them with minimum investment. No delivery server/utility software is required
2. Data can be used and shared amongst Client PC/servers on the network.

Scan to Folder Flowchart (SMB):



Scan to NCP

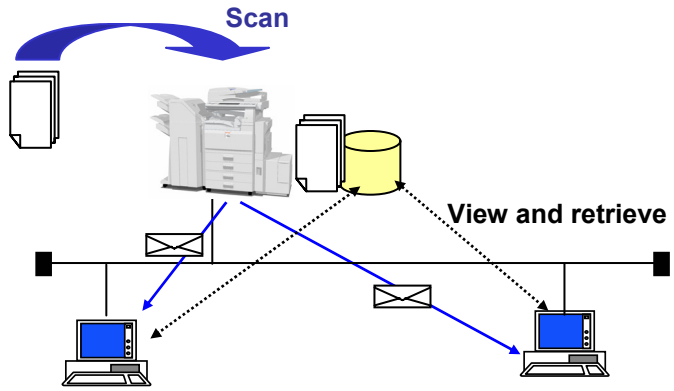
New

Scan to NCP works in exactly the same way as Scan to SMB, but in Netware environments. Data can be shared between Client PCs and servers on the network in Novell Netware environments. No additional server or utility software is required.

Scan to URL

New

Apart from the cost benefits of Scan to URL, this function is ideal for transmitting scanned electronic data without placing a burden on network traffic. Instead of attaching large documents to an email, the IS 2235 / 2245 will store the scanned document in the HDD and send only the URL address as an attachment to the email. The email recipient can then view and download the document via a Web Browser.



[URL of the document is attached to the E-mail]

Please access the URL below
http://dankaeurope.com/?open=webdocbox/docFile.cgi?
Document name: sales strategy
Stored time: 2004.11.30 15:31:21
Doc storage period till: 2004.12.08

1.Scan to E-mail by storing the document in the HDD of the IS 2235 / 2245

2.URL address of the stored document is sent as an attachment to E-mail recipients.

3.Recipients can view and retrieve the document via a Web Browser.

Improved network productivity.

Versatile Network Connectivity

The IS 2235 and IS 2245 have built in as standard a 10/100BaseT Network Interface Board (NIB) and USB2.0. In addition, customers can select from the following:

- Wireless LAN Interface (IEEE802.11b)
- IEEE1394 FireWire
- Bluetooth
- IEEE 1284 (parallel port)

Enhanced Printing Functions

The IS 2235 and IS 2245 introduces a wide variety of new printing functions, and enhances existing features with expanded capabilities. Major specification improvements are as follows:

	IS 2235 / 2245	IS 2135 / 2145
Standard I/F	Ethernet (100 base TX /10 base T), USB2.0 I/F	Ethernet (100 base TX /10 base T), IEEE 1284 I/F
Optional I/F	IEEE 1284 I/F, IEEE 1394 I/F, Wireless LAN I/F, Bluetooth I/F	USB2.0 I/F, IEEE 1394 I/F, Wireless LAN I/F, Bluetooth I/F
Controller CPU	RM7035C-466 466MHz	RM7065A 300MHz
Memory capacity	384MB (resident 128MB + optional 256MB)	192MB (resident 64MB + optional 128MB)
Hard Disc Drive	40 GB	20 GB
Password Encryption with User Authentication	Yes (RPCS, PCL)	No

Strengthening of printer features for better functionality has been a key area of improvement with the launch of the IS 2235 / 2245. Customer requests for usability enhancements are summarised below:

- Ability to sort print files by user on the LCD
- Ability to store data with print settings
- Ability to select, print or delete all files from the LCD in a single operation
- Ability to save data even when power is off
- Substitute physical mailbox for a “virtual mailbox”

The IS 2235 / 2245 satisfies these requests, and introduces new and enhanced features.

	IS 2235/45	IS 2135/45
Sample Print	Yes – enhanced	Yes
Locked Print	Yes – enhanced	Yes
Hold Print	Yes	No
Stored Print	Yes	No
Mask Type for Copying	Yes	No
Data Security for Copying	Yes	No
PDF Direct Print	Yes	No

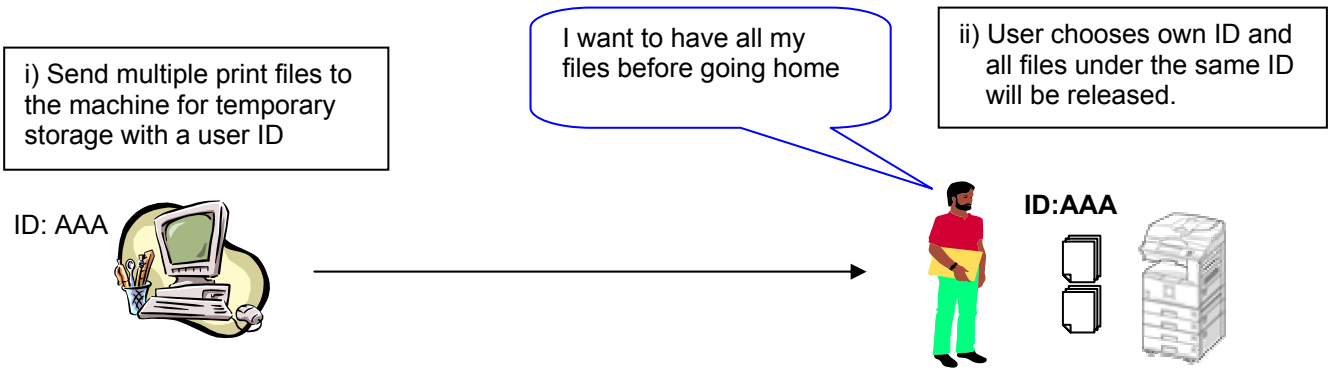
Sample Print & Locked Print Enhanced

Total capacity of stored files is increased from 30 to 100.

Hold Print New

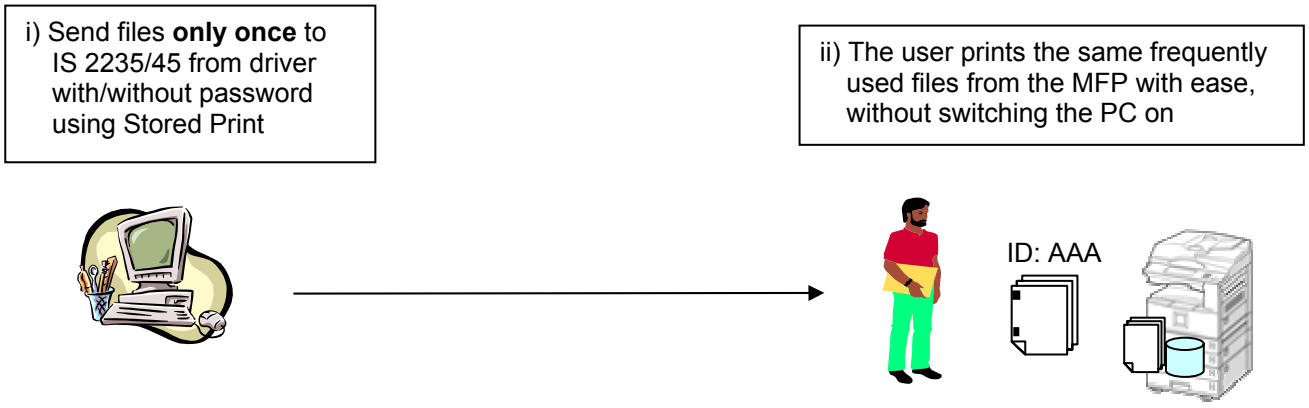
Hold Print was designed for users who want to:

- avoid leaving their confidential documents on the MFP
- temporarily store print files which are sent to the MFP at different times so that they can all be picked up at a designated time that is convenient
- avoid the cost of a physical mailbox but still have their own “tray” for print output so as to prevent mixing up their prints with others
- print without a password, and not store files after printing


i) Send multiple print files to the machine for temporary storage with a user ID
I want to have all my files before going home
ii) User chooses own ID and all files under the same ID will be released.
ID: AAA
ID:AAA

Stored Print New

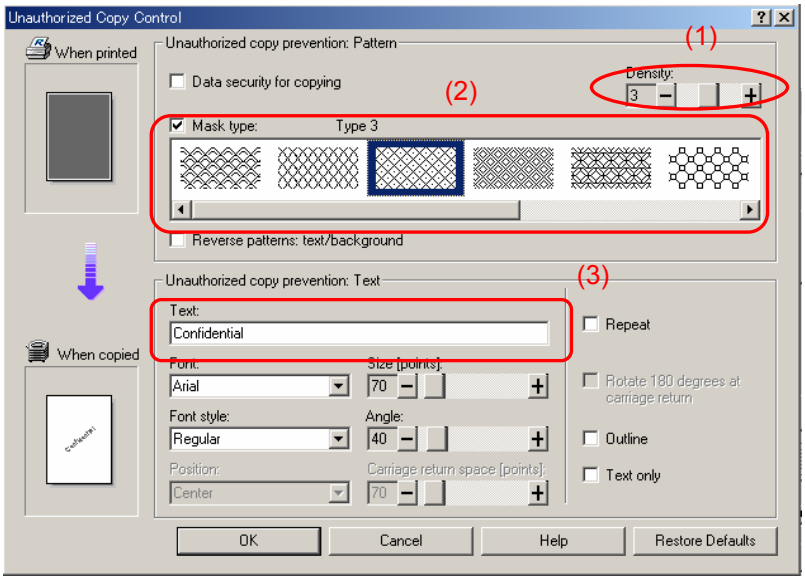
Stored Print was designed for users who print the same files frequently with the same print settings.


i) Send files **only once** to IS 2235/45 from driver with/without password using Stored Print
ii) The user prints the same frequently used files from the MFP with ease, without switching the PC on
ID: AAA

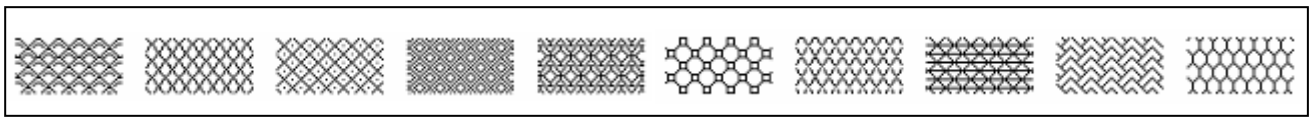
Mask Type for Copying New

To prevent unauthorised copying of printed documents, the IS 2235/2245 includes the ability to insert embedded patterns or messages into the document. Should anybody try to copy or scan the document (on an IS 2235/45 or IS2225/30), the embedded message or pattern will appear on the copy. Choose a masking style:

RPCS driver



(1) 5 print densities (level 1~5)can be selected for the masking patterns.(Default: level 3)
(2) 10 masking patterns can be selected from the RPCS driver.

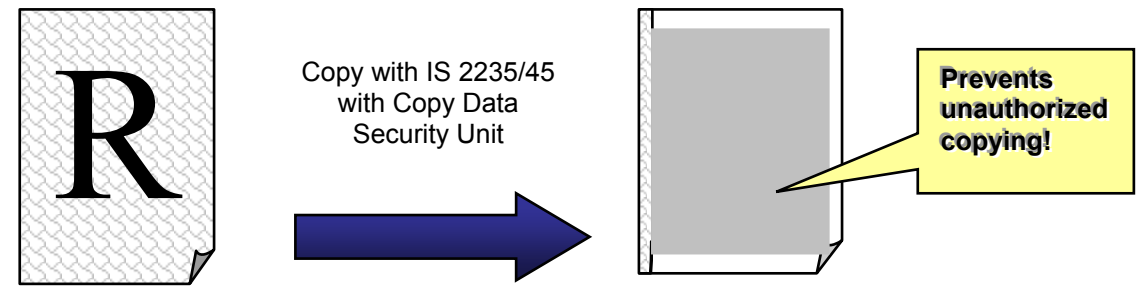


(3) An embedded message can be entered in the Text field.

Data Security for Copying New

The Data Security option works in a similar way to the masking feature. The document is printed out with an embedded masking pattern or embedded text. If you try to copy the printed document, everything will be greyed out. This option is for customers with extremely high security concerns.

***It will de-activate scan to e-mail/folder/Twain and faxing as these features are often deemed to be a security hole.**

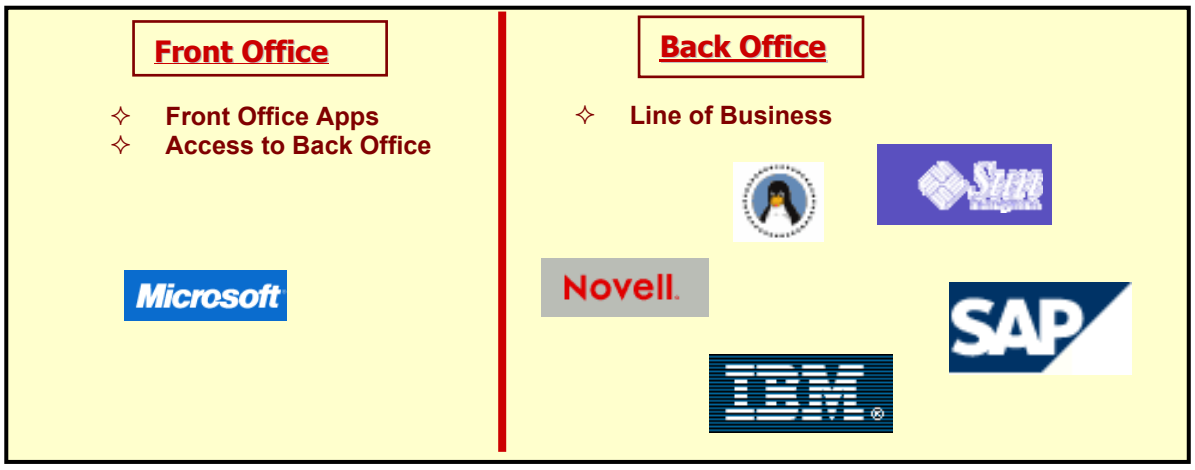

R
Copy with IS 2235/45 with Copy Data Security Unit
Prevents unauthorized copying!
Print out with the embedded patterns
Output of the copy will be greyed out!!

PDF Direct Print (with PS3 option) New

PDF is the platform-independent file format that compresses files without losing the original layout. But when it comes to printing, this advantage is lost because the printer driver turns the compact PDF file into a large PostScript print job before sending it through the network to the printer. To solve this problem, PDF Direct Print allows customers to print PDF files without the printer driver. This is much quicker than using the printer driver, and as a result, network traffic will be reduced and productivity increased.

Printing in non-Windows environments using Connectivity Tools

In the office, several information resources are used for communication, both inside the company and with clients outside. Over the past 10 years, due to the information technology revolution, printing solutions have been continuously improved to cater for changing requirements to cater for the move from analogue to digital. Until recently, documents created in the "Front Office" mainly from Microsoft Office applications such as Word and PowerPoint, satisfied most of the market's requirements. As business opportunities have expanded through digital technology and the advanced capabilities of multifunctional products, the need to handle print data from the "Back Office" has now become widespread. Capturing this "Line of Business" data flow can be achieved with a variety of connectivity tools.

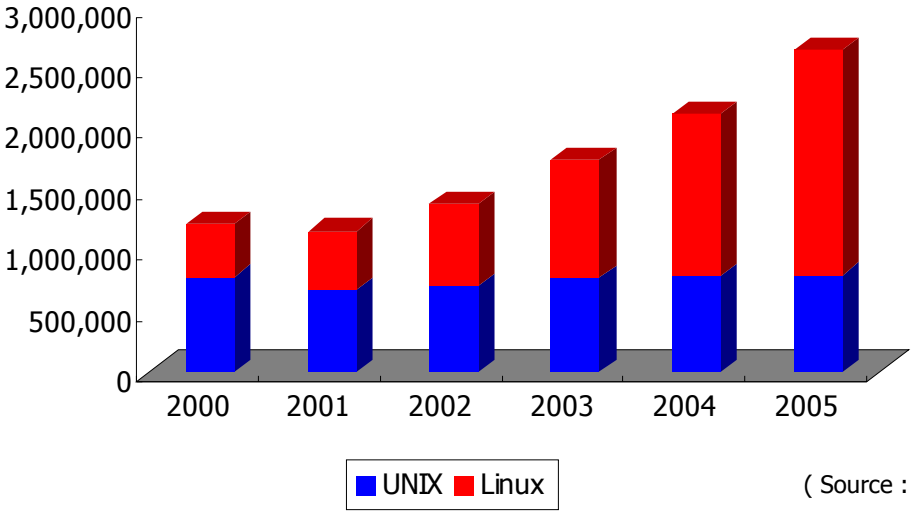


Printing on the UNIX/Linux Platform

Microsoft Windows dominates the client OS market, however, UNIX and Linux operating systems are widely used. This is because of the cost advantage of UNIX/Linux in licensing and initial costs, its stability as an operating system, and its reliability especially in security.

If we look at the annual growth trend of UNIX/Linux shipments according to IDC, the adoption of these OS is increasing year on year. The growth of Linux OS is particularly remarkable, with many corporate customers adopting this platform. UNIX operating systems have traditionally been used in Engineering, Manufacturing and Education (particularly universities).

UNIX/Linux shipment trend estimation (2000-2005)



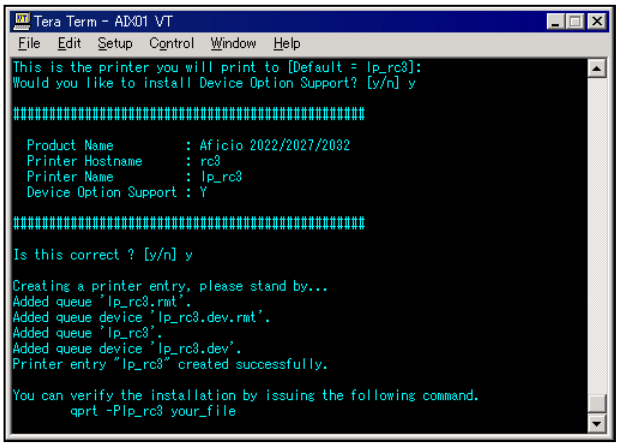
(Source : IDC)

Our Solution

The solution we provide is a connectivity tool called “UNIX FILTER” - downloadable for free from the Web. This tool enables users to print the job from UNIX and Linux systems using the various finishing options of our multifunctional devices.

UNIX Filter – main points and screen shot

- Interactive dialogue script for printer installation
- Device Option setting in UNIX environment
- (Tray selection, Duplex, Staple etc.)
- Supports OS standard print commands for each OS
- All Infotec MFP/LP devices supported
- Major UNIX/Linux OS support


Tera Term - AIX01 VT
File Edit Setup Control Window Help
This is the printer you will print to [Default = lp_rc3]:
Would you like to install Device Option Support? [y/n] y
Product Name : Aficio 2022/2027/2032
Printer Hostname : rc3
Printer Name : lp_rc3
Device Option Support : Y
Is this correct ? [y/n] y
Creating a printer entry, please stand by...
Added queue 'lp_rc3.rmt'.
Added queue device 'lp_rc3.dev.rmt'.
Added queue 'lp_rc3'.
Added queue device 'lp_rc3.dev'.
Printer entry "lp_rc3" created successfully.
You can verify the installation by issuing the following command.
qprt -Plp_rc3 your_file

Printing with CUPS (Common UNIX Printing System)

PPDs for our MFP/LPs have been posted on www.LinuxPrinting.org since 22nd February 2005. By distributing PPDs on www.LinuxPrinting.org, we will be able to capture customers who purchase MFPs/LPs in a UNIX/Linux printing environment.

What is CUPS?

CUPS (Common UNIX Printing System) has become a popular printing system in the Linux environment. CUPS covers both the Berkeley commands and System V commands, which means that all UNIX users can use it. CUPS provides an effective and reliable printing system, and supports:

- IPP(Internet Printing Protocol) native, which supports authentication, access control and encryption
- lpd, SMB (supports printers connected to Windows networks)
- Browsing network connected printers
- PPD (PostScript Printer Description) can be implemented in CUPS, which enables users to use printers' unique features and device options.

This means that UNIX/Linux users can easily use printers in the same way that they use Windows OS.

What is www.LinuxPrinting.org?

www.LinuxPrinting.org is an official site to support and help with printing under opensource free operating systems like GNU/Linux and BSDs, or under commercial UNIX-like systems such as Solaris and OS X.

For supporting unique features and device options of each printer, CUPS needs each PPD of printer vendors. Most Linux distribution package vendors use this site to obtain printers' PPDs to bundle them into their distribution package. Posting the PPDs on the site will help to promote the use of our MFPs by UNIX/Linux users.

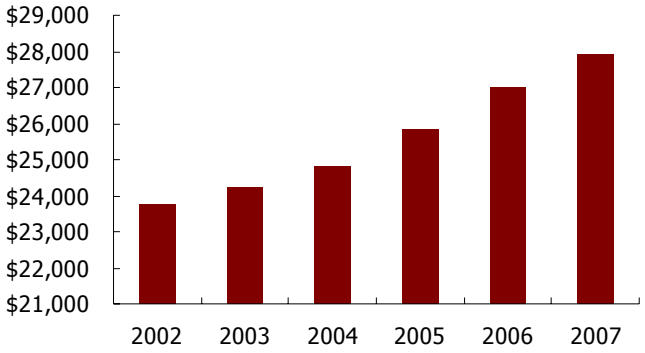
Note that the PPDs are posted as free software under MIT licence and are therefore not subject to official support from Ricoh.

http://www.linuxprinting.org/

Printing in the SAP/R3 Environment

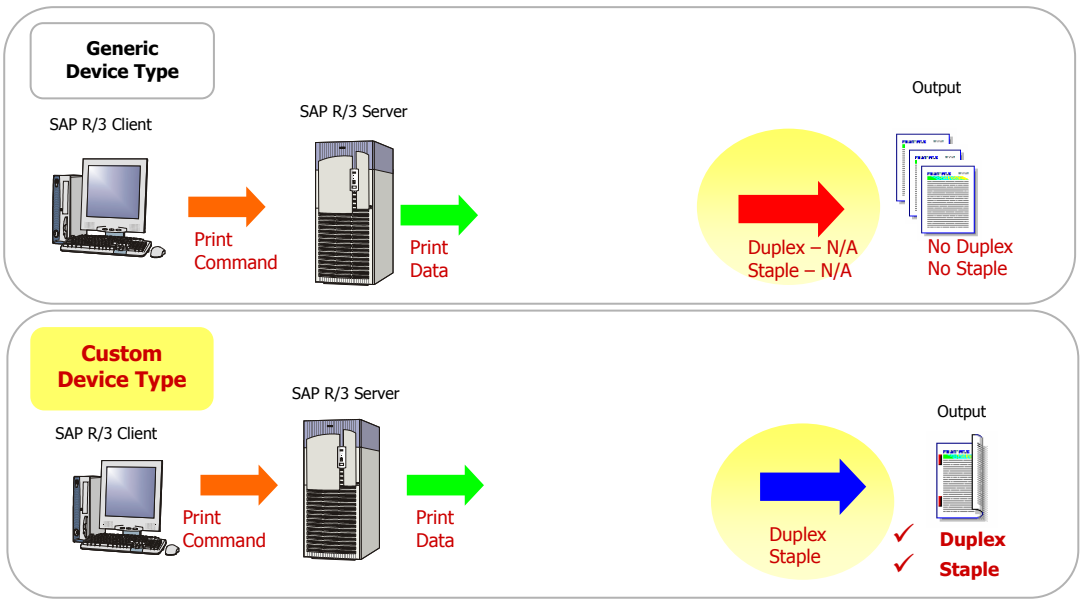
ERP (Enterprise Resource Planning) is the industry recognised term for a broad set of activities supported by multi-module application software that helps managing important parts of the business – such as product planning, purchasing, inventory, supplier interaction, customer service, order tracking etc. In addition, Finance and Human Resources management can be added to manage other functions of the business. The demand for the adoption of these types of resource management products is increasing year on year.
SAP R/3 and Oracle are the most popular ERP systems.

Worldwide ERP Licence and Maintenance Forecast 2002-2007 (M$)



SAP R/3 architecture is made up of application client system and database servers. SAP primarily focuses on the systems and applications for data processing rather than document output. Therefore, many printer capabilities are not supported as standard in SAP R/3.

A Custom Device Type has been developed that allows SAP R/3 customers to select and use our hardware finishing options to improve the quality and presentation of the document. The SAP Device can be downloaded for free from the download web site.



Novell NDPS Gateway

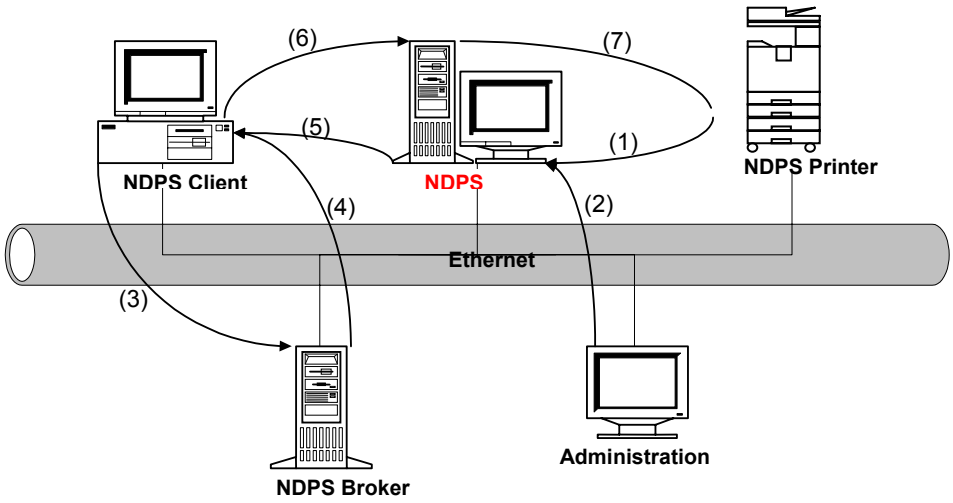
NDPS Gateway Snap-Ins are required to configure printers to operate in a Novell Netware NDPS (Novell Distributed Print Service) architecture.

NDPS Gateway Overview

The following description shows how the NDPS gateway works in a NetWare environment.

1. The NetWare printer can be found by the NDPS gateway
2. It can also be manually added to the NDPS manager where the NDPS gateway resides.
3. If the NDPS client wants to add an NDPS printer to its desktop, it queries NDPS brokers about all available NDPS printers.
4. The NDPS broker informs the NDPS client of the list of NDPS printer agents.
5. After a printer agent is selected, the correct printer driver is downloaded to the NDPS client's desktop.
6. Later, the NDPS client sends print jobs to the printer agent which is a virtual printer image created in the NDPS network.
7. The NDPS manager then passes the print jobs to the NDPS gateway that issues the native printing commands to the printer.

NDPS Gateway Overview

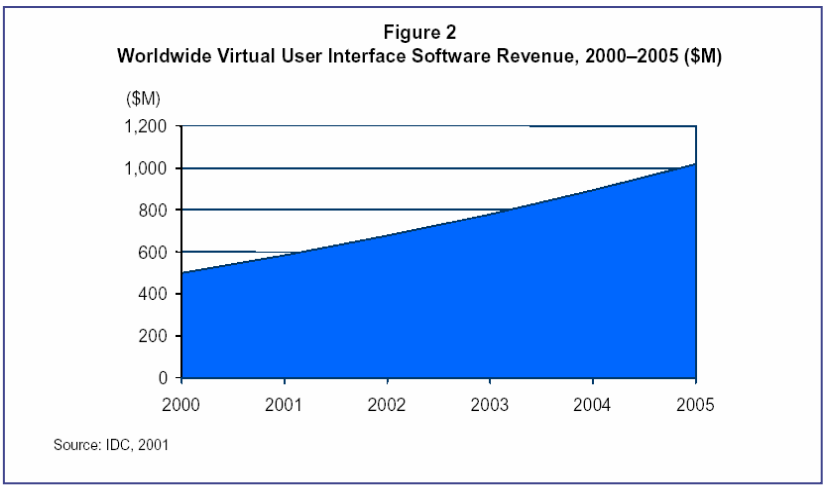


NDPS Gateway can be downloaded for free from the download web site.

Printing on Citrix Metaframe

Server Based Computing (SBC) has recently received attention from a system management viewpoint. MetaFrame™ makes up 80% of this SBC market according to Citrix®,

The benefit of Server Based Computing is that the system simplifies IT managers' tasks. Normally application software and/or device drivers, must be installed on all client PCs. In the SBC environment, installation is only on the server. Another benefit of SBC is that data is protected from simple mistakes by the client PC user. In non-SBC environments, limiting access, creating a firewall, introducing virus countermeasures and other security steps are taken to protect data. However, if the client PC, especially laptop, is stolen, all important data in the unit is completely lost. This cannot be prevented by any IT countermeasures.



- SBC(Server Based Computing) market is still growing
- Market size from Y2000 to Y2005 nearly doubled
- MetaFrame™ has about 80% of its market share

Advantage of Metaframe

- ✓ Save PC management cost
- ✓ Utilize old version PCs
- ✓ Strengthen security
- ✓ High speed response with Narrow Band

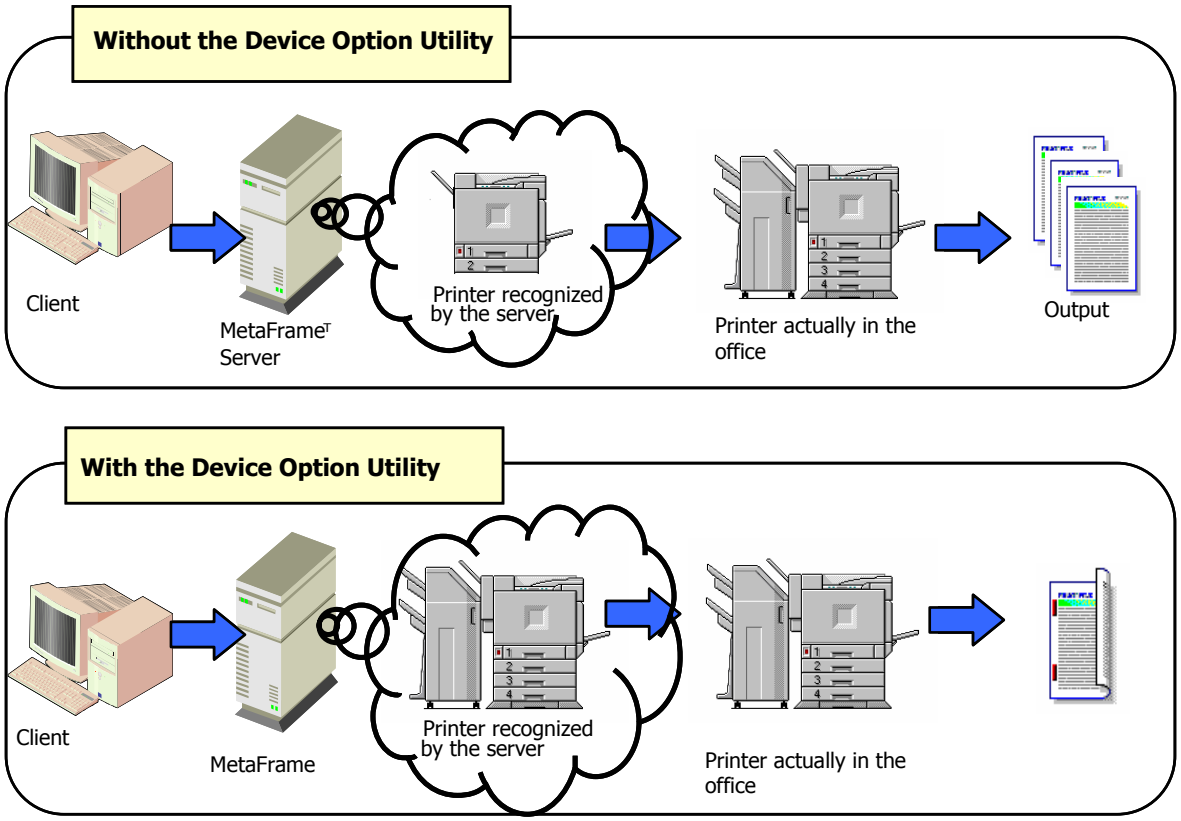
Disadvantage of Metaframe

- ✓ Cannot use device options
  - -Duplex
  - -Staple
  - -Tray selection
  - etc....

This MetaFrame™ has its own unique printer function. However, there is a major limitation of printer option device management with this standard function which is that options installed on the printer cannot be used.

Our Solution

We provide a **Device Option Utility for Metaframe** to resolve this problem. It can be downloaded free from the download web site.



Connectivity Tools and Logo Usage (status)

Category	Company	Name	Products have sufficient specification	Certification		Use of Logo
				Program	Certified	
Network Management Tools	IBM	Tivoli NetView	Yes	Yes	Yes	Yes
	CA	Unicenter	Yes	Yes	No Plan	No
	HP	Open View	Yes	Yes	Yes	Yes
ERP	SAP	R/3	Yes	No	N/A	No
OS Related	Novell	YES	Yes	Yes	No Plan	No
	Novell	NDPS Gateway	Yes, 3Q 2005	Yes	No Plan	No
	-	UNIX Filter	Yes	No	N/A	No
	Microsoft	MS Certificate	Yes	Yes	Yes	Yes
	Apple	MAC	Yes	Yes	No Plan	No
PDL	Adobe	PostScript 3	Yes	Yes	Yes	Yes
Connectivity	-	High-Speed USB	Yes	Yes	Yes	Yes
	-	Bluetooth	Yes	Yes	Yes	Yes
	-	IEEE1394	Yes	Yes	Yes	Yes
	-	Wi-Fi	No	Yes	No	No
SDK	Sun Microsystems	Java	Yes	Yes	Yes	Yes

Advanced Faxing Functions

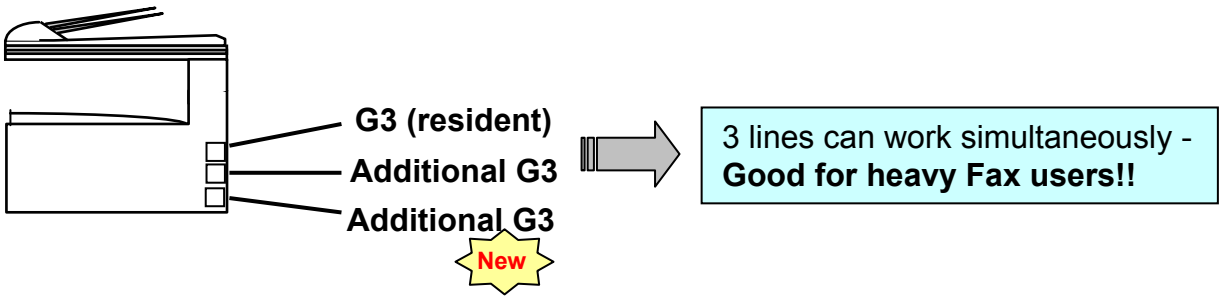
The IS 2235/2245 introduces new and improved fax functions whilst retaining the versatile features of it's predecessor. ***And JBIG now comes standard with the fax option.*** New

High speed G3 Fax

- 33.6 bps modem speed
- 2 sec. transmission speed
- 0.86 sec. scanning speed
- 2000 quick dial numbers

Multi-Port

The IS 2235 and IS 2245 are upgradeable to 3 lines which are available simultaneously.



Internet Fax (T.37 Full mode)

Internet Fax provides several fax distribution solutions to significantly improve productivity in the office. The IS 2235/2245 Internet Fax Function is compliant with "ITU-T Rec. T. 37. Full Mode." Delivery confirmation can be received from another I-Fax machine, which also supports T.37 full mode.

The following chart shows the difference between the IS 2235/45's Full mode and the IS 2135/45's Simple mode. Please note that the Full mode capability depends entirely on the other Internet Fax's capability.

	IS 2235 / 2245	IS 2135 / 2145
	T.37 Full Mode	T.37 Simple Mode
Original Size	A3, A4, B4	A4 only
Resolution	200x100dpi/ 200dpi/ 400dpi	200x100dpi/ 200dpi
Compression method	MH, MR, MMR,	MH only

Compatibility table of sender / receiver using a G3 Fax or an Internet Fax

		Receiving End Terminal		
		Internet Fax	**PC**	**G3 Fax**
Sender IS 2225 / 2230	**Internet Fax by E-mail**	Yes	Yes	No
	G3 Fax	No	No	Yes

		IS 2225 / 2230 as Receiver	
		Internet Fax	**G3 Fax**
Sender	**Internet Fax by E-mail**	Yes	No
	PC	Yes (text only)	Yes*
	G3 Fax	No	Yes

*using LAN-Fax feature

- **Sending Internet Faxes from IS 2235 / 2245**
  The receiver terminal can be an Internet fax or a PC. Sent documents will be scanned and transmitted in T.37. The e-mail address book in the IS 2235 / 2245 mainframe is shared with the Scan to E-mail application and Internet Faxing application.

- **Receiving Internet Faxes with IS 2235 / 2245**
  The IS 2235 / 2245 will receive Internet faxes from an Internet fax terminal or PC. If the document is sent from a PC to the IS 2235 / 2245 as an Internet fax, the contents of the sender's E-mail will not include any application files. The IS 2235 / 2245 will reject the E-mail as a transmission error.

Paperless / Server-less Fax

The IS 2235 / 2245 can store the incoming fax data to its SAF memory without an additional server. Using this function, customers can check the receiving fax data using Web Image Monitor. Printing, deleting or downloading the stored data to a PC are all possible from Web Image Monitor. Paperless / Server less fax systems can easily be proposed to customers as an easy fax solution for light fax usage.

Using the SAF memory, the following number of pages can be stored:

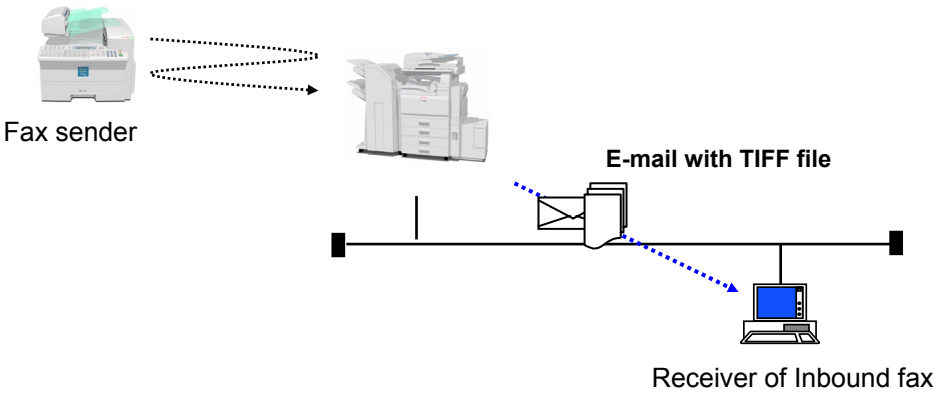
	SAF memory	**Number of Pages**
Standard	4MB	320 pages
With SAF Memory option	28MB	2,240 pages

When the SAF memory is full, the machine will start printing out data from the oldest date, and then delete the data after the print is completed.

Fax Forwarding

Forwarding Inbound Faxes to E-mail

Users can programme inbound faxes to be forwarded to receivers directly via E-mail. This can be for single receivers such as administrators, or to multiple receivers in a workgroup. The inbound fax will be converted to TIFF format when forwarded to the E-mail destination.



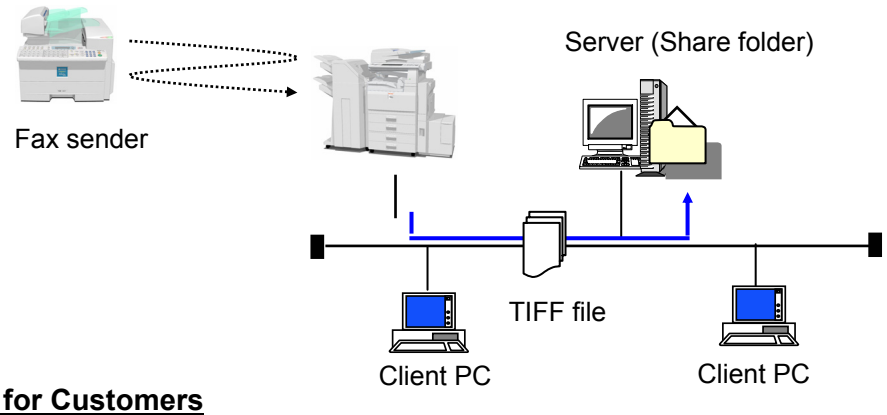
Benefits for Customers

- Reduce administrative workload and improve productivity.
- No physical location restriction in receiving faxes.
- Security, as sensitive documents will not be printed on the MFP and left on the machine for all to see.
- Since received faxes are converted into electronic documents, users can rename them for electronic archiving for future record.

Forwarding Inbound Faxes to Folder

New

Users can programme inbound faxes to be forwarded to folders in the server or to the users' own PCs. The fax documents will be converted to TIFF files in the MFP and will be transmitted accurately to the folders via the local network.

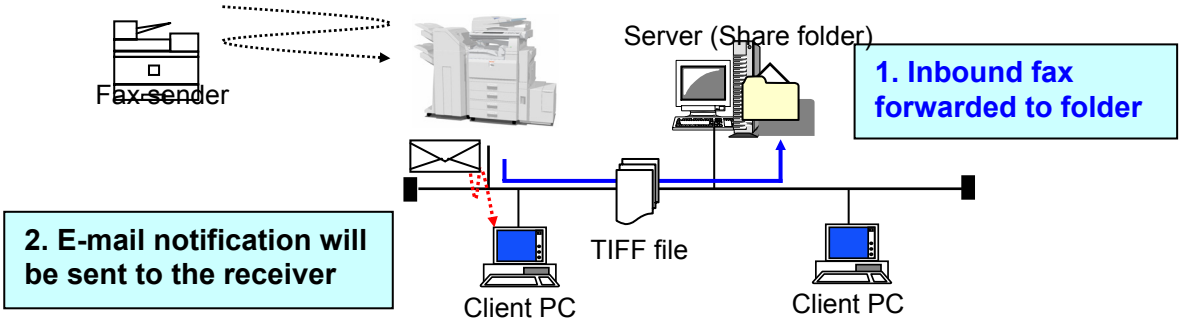


Benefits for Customers

- Security: Since the fax documents will be converted into electronic data and transmitted via local network, the risk of theft will be eliminated. Paper documents will no longer be left on machines.
- Manageability: Improves the workflow of the fax operator
- Utilise the existing LAN/WAN network: Minimum investment
- Provide cost saving and secure document distribution solution
- No E-mail infrastructure required
- Files as large as 2GB can be sent, almost no limit in document size for general users

E-mail Notification of Inbound Fax to Folder New

The Inbound Fax to Folder feature provides accuracy and safety to users. However, users still need to know when faxes are forwarded to their folders, otherwise productivity is compromised through having to frequently check folders. The solution that the IS 2235/45 provides is to notify users each time faxes are forwarded to folders.



Benefits for Customers

- Better security: no fax documents sitting on the machine, no routing through SMTP servers.
- Help in inbound fax filing: folder in the PC can act as an electronic repository for inbound faxes.
- Timely updates: keep fax admin advised of incoming faxes
- By using the special sender features, faxes from specific sender numbers (TSI) can be forwarded to designated folders in the PC

Forwarding of fax transmission results to E-mail

If users programme the “E-mail TX Result” in the Quick Operation Key, they can select transmission report by E-mail from the touch screen panel before scanning the fax documents for sending. This is a kind of “To My E-mail” function for improving productivity and efficiency in the office.

Benefits for Customers

- Users do not have to take the trouble to check the transmission report, or even to open Web Image Monitor to confirm fax transmission results, especially if there is a batch transmission where users have difficulty in telling when and how much time the transmission will take.
- Users do not have to print out the transmission report on paper for filing purposes. Transmission reports can be filed as an E-mail record in order to reduce TCO.
- The faxed document will be attached with the E-mail as a TIFF file for user confirmation. When there is heavy transmission and multiple transactions, users can verify the faxed contents easily by just opening the attached file.

Fax Number search using LDAP

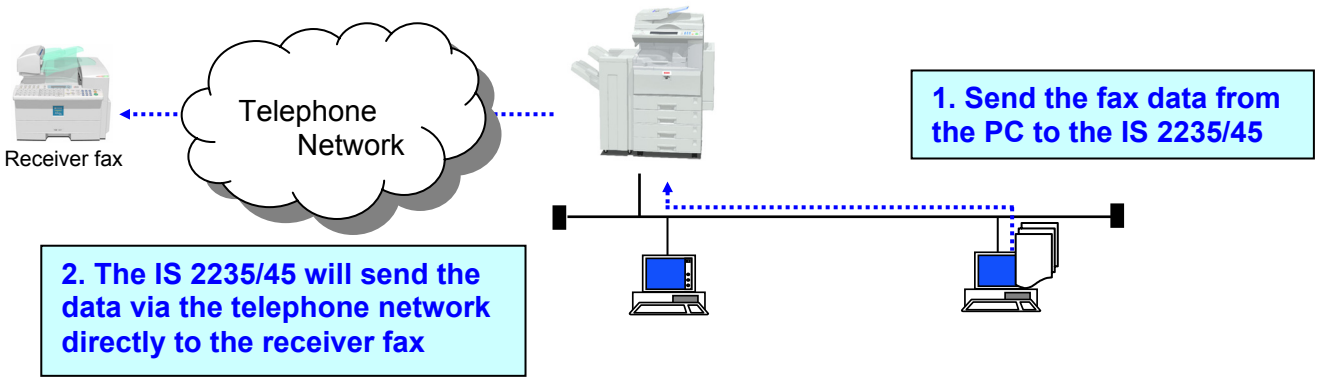
You can now search for a Fax number from the LDAP server in the same way as you would search for an email address, improving manageability of the address book.

Benefits for Customers

- Improve manageability of address book management.
- Same operation with LDAP search of scan to E-mail.

LAN Fax

(Printer/Scanner option required for this function)
This function allows you to transmit fax messages directly from your PC, reducing the number of steps required when you send a fax.

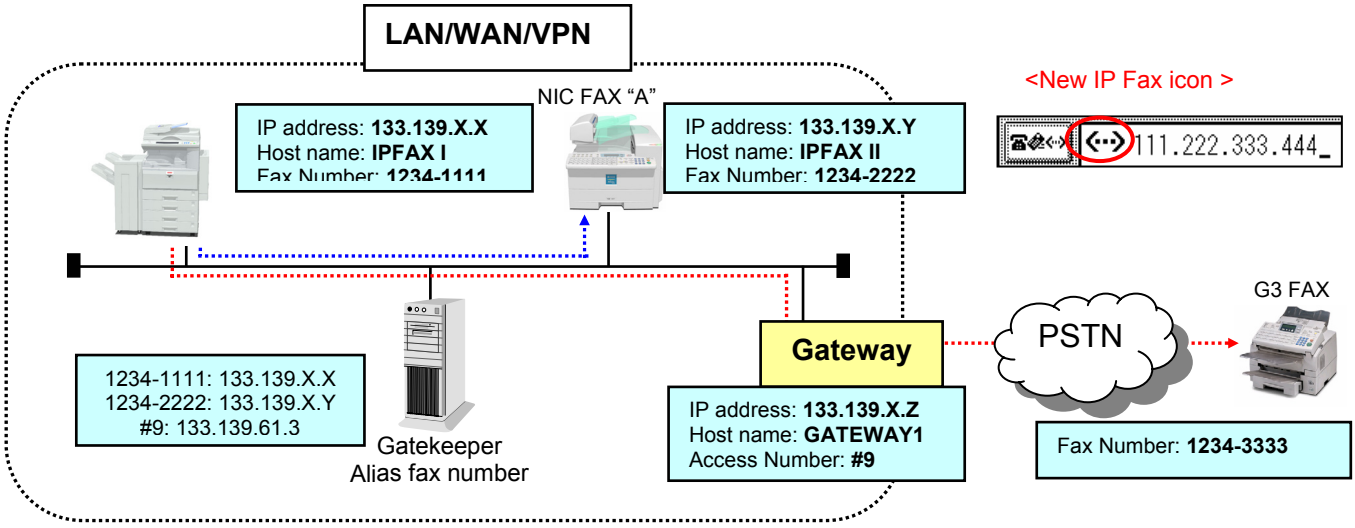

Receiver fax
Telephone Network
1. Send the fax data from the PC to the IS 2235/45
2. The IS 2235/45 will send the data via the telephone network directly to the receiver fax

IP-FAX (T.38)

New

(Printer/Scanner option required for this function)
With the IP-Fax feature, you can send or receive faxes from the IS 2235/45 to an IP-Fax machine which is directly connected to the same network using the TCP/IP protocol. Use the IP address instead of the fax number to specify the destination machine, or use the alias number when using the gatekeeper. You can also send faxes to G3 fax machines connected to PSTN via the VoIP gateways (with the T.38 Function).

No E-mail server is required since the NIC Fax communicates with the destination fax machines that are connected to the same network – and the transmission speed is higher than using G3.

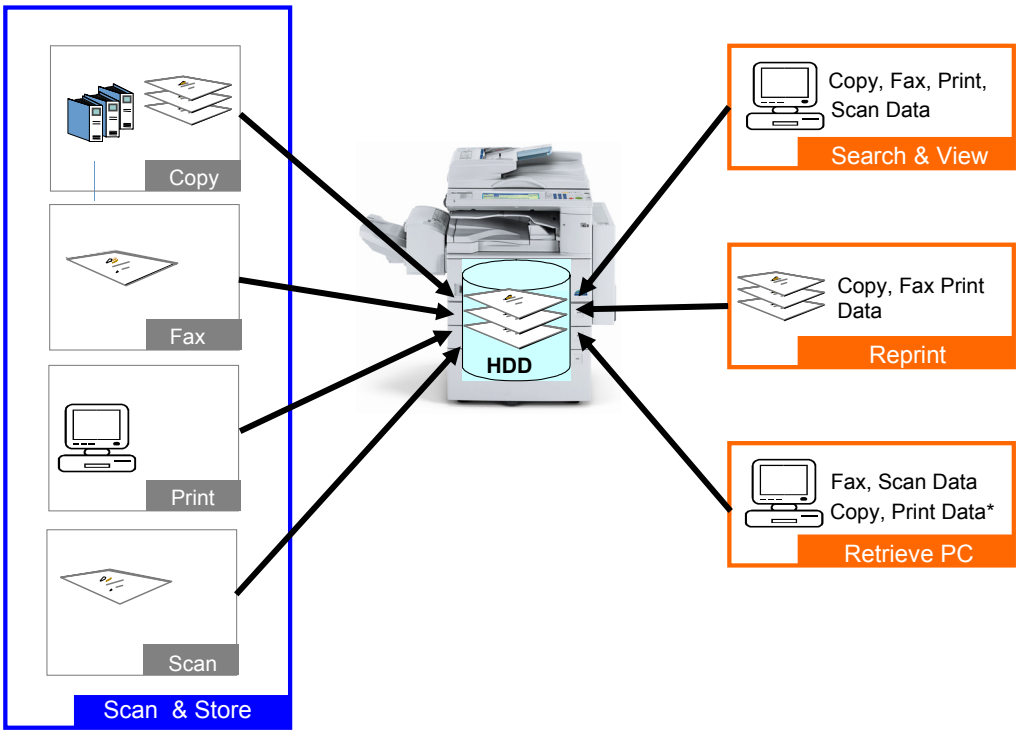


Benefits for Customers

- Fast and high quality communication.
- Only need an IP address: No mail server needed.
- Provide real fax confirmation.
- Communication through LAN/WAN network instead of PSTN reduces cost

Document Server

Documents (files) from different applications such as the copier, printer, fax or scanner function can be stored in the 40GB hard disk drive and reused. Using the Web Image Monitor, it is easy to search and view saved documents in the Document Server using a standard web browser.



Retrieve to PC - Download Fax & Scan data in PDF, Multi-page TIFF or JPEG
With the File Format Converter you can also download Copy & Print data

Search & View (with Web Image Monitor) - Search files by file name or user name
View files by thumbnail, icon or detail

Benefits to Customers

Easy "paper to electronic" conversion – large quantities of documents can be converted to electronic data quickly. Using the HDD for storage reduces paper consumption (cost saving), helps to manage both paper and electronic documents (improves productivity), and finding the right document is much easier (saves time). And the HDD can also be accessed with the Web Image Monitor (ease of use).

Maximum number of A4 pages that can be stored in the Document Server

Copy	B&W (ITUT No. 4 chart)	2,500
Print	B&W (Lyla chart)	9,000
Fax	B&W (ITUT No. 1/200dpi MMR)	9,000
Scan	B&W (ITUT No. 1/200dpi MMR)	9,000

The actual storage capacity may differ from the above, depending on the type of document and scanning resolution.

Capacity of the Document Server

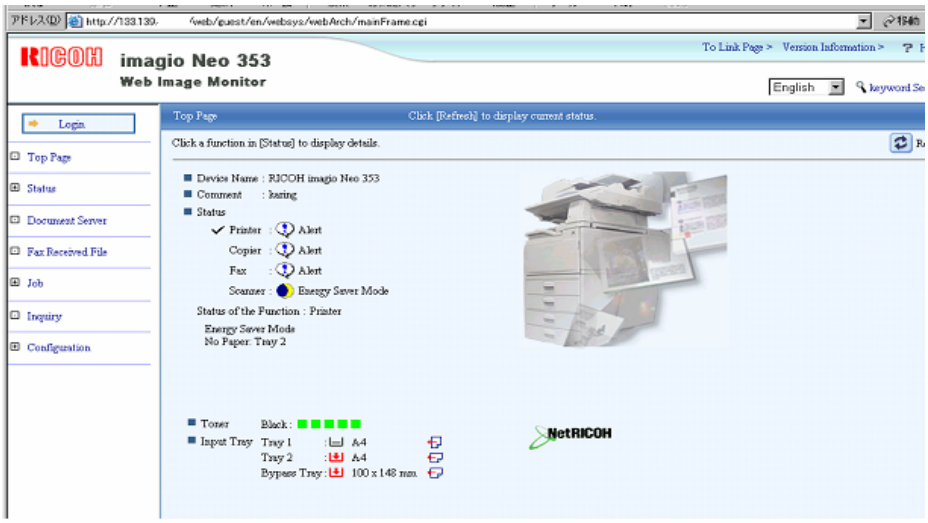
Maximum stored documents	3000 documents
Maximum pages per document	1000 pages per document
Maximum pages of all stored documents	9000 pages

The Document Server capacity depends on the image coverage of each document, therefore actual maximum capacity may vary.

Web Image Monitor

The Web Image Monitor makes it easy through a web browser to find data stored on the HDD. Documents can then be retrieved for reprinting or attaching to an E-mail. Web Image Monitor enables you to monitor the machine status, change network settings, view and handle the Document Server, manage the address book, and monitor the job log from your PC. No additional software installation is required, only a general web browser is required. With the IS 2235/45 there are several new administrator mode settings and applications that have been added that improve the manageability of the machines.

User friendly screen for users to navigate:



Benefits to Customers

No software required, therefore no additional cost incurred.
This function is preferred by IT Managers, as there is no burden on PCs.
Because it is Web based, it has the most common user interface which requires no training.
All functions that users and administrators require are included, therefore it is an ideal document management tool for customers.
Users are more productive as data can be reused either for printing or attaching to e-mails.

New View/Edit Network settings in Administrator Mode:

- Device
  - Data/Time/Timer
  - Auto E-mail Notification
  - On Demand E-mail
  - User/Admin Authentication Management
  - Programme/Change Admin
- Printer Network Settings
- Fax
  - General/Admin/E-mail
  - IP-Fax Settings
  - Gateway Settings
  - Parameter Settings
- Security
  - Network Security
  - SSL/TLS
  - Certificate
  - Remote Communication Gate

Security

The need for Security

As office products evolve to advanced network devices, security threats such as data theft or falsification of electronic data through "spoofing" or tapping have become common problems for many companies and governments. As a result our products which sit on the network are under increasing scrutiny by customers whose security needs are on the increase. There are in fact many organisations and military divisions that forbid the installation of multifunctional products. With the introduction of the new security features of Windows Authentication, an improved DataOverwriteSecurity (DOS) unit and the new Unauthorised Copy Control features for the IS2235 /45, we can provide a secure environment for these customers.

Furthermore, as a result of the increased level of criminal and terrorist activity directed at networks, new laws have been and are being introduced that require organisations to protect sensitive and personal information - such as banks, hospitals etc. The cost of cleaning up systems after a cyber attack is driving organisations to look for preventative measures.

Who threatens security?

Security is not only threatened by organised criminals or industrial spies, it can also be threatened from within organisations – knowingly or unknowingly. There are also amateur hackers who try to break into networks to prove their expertise and earn status.

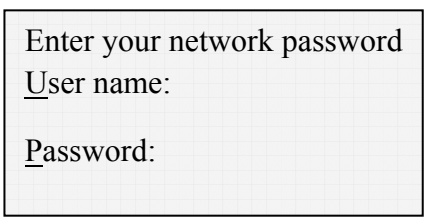
The IS 2235 and IS 2245 address security concerns in 5 areas:

- Authentication
- Encryption
- HDD Data Protection
- Scan Security
- Conventional Document Server Security

Authentication

Windows Authentication on the IS 2235/2245 requires no dedicated user name and password, and no additional expenditure on hardware or software. The customer's existing network security system can authenticate an individual user by using their existing username and password that they already use to Login to their PC.

When accessing the MFP (either at the machine itself or from the PC), users are asked for their user name and password – these are then verified by the Windows server:



Once the login information is authenticated, scanning is available, and the authenticated username automatically goes to the sender name field and cannot be changed. This eliminates "spoofing" and the secure network integrity is maintained.

The IS 2235/45's authentication function provides access limitation management by individual users and groups of users. By utilising this access limitation management, customers can limit the machine's available functions, and protect the machine settings, files and data stored in the machine from unauthorised access.

To use the Authentication function, Users and Administrators need to register. An Administrator manages access to the allocated functions, and Users can use only the functions they are permitted to access.

Administrators

There are four types of Administrator, and a Supervisor. By sharing the administrative work amongst different administrators, customers can spread the workload and limit unauthorised operation. To prevent unauthorised changes to any settings, Administrators are also required to be authenticated.

- The Machine Administrator mainly manages the machine's default settings.
- The Network Administrator manages the network settings and prevents unauthorised access over the network. The Network Administrator will manage IP addresses and e-mail settings.
- The File Administrator manages permissions to access stored files on the HDD
- The User Administrator manages personal information in the address book.

The Supervisor can delete an administrator's password and specify a new one, but cannot specify machine settings or use functions.

Users

By enabling user authentication, customers can allow only people registered in the address book to use the machine. Users can also register by using Web Image Monitor or SmartDeviceMonitor for Admin.

There are four user authentication methods:

- User Code Authentication
- Basic Authentication
- LDAP Authentication
- Windows Authentication

User Code Authentication

User code authentication is the conventional method of gaining access to the device through the control panel using a user code. Access to specific functions can be limited. This authentication method is ineffective as the same user code can be used by more than one user.

Basic Authentication

Basic authentication utilises a user name and password system and is slightly more sophisticated than the User Code method in that it can limit access to stored files and personal data in the address book, but it is not supported over the network.

LDAP Authentication

New

LDAP authentication authenticates an individual user who has their account on the LDAP server. This is done by utilising the existing network username/password. The benefit of LDAP authentication is that it uses the existing Windows network login infrastructure. This satisfies the IT manager, as there is no additional login-password required. The users are also happy, as they do not need to remember an additional password.

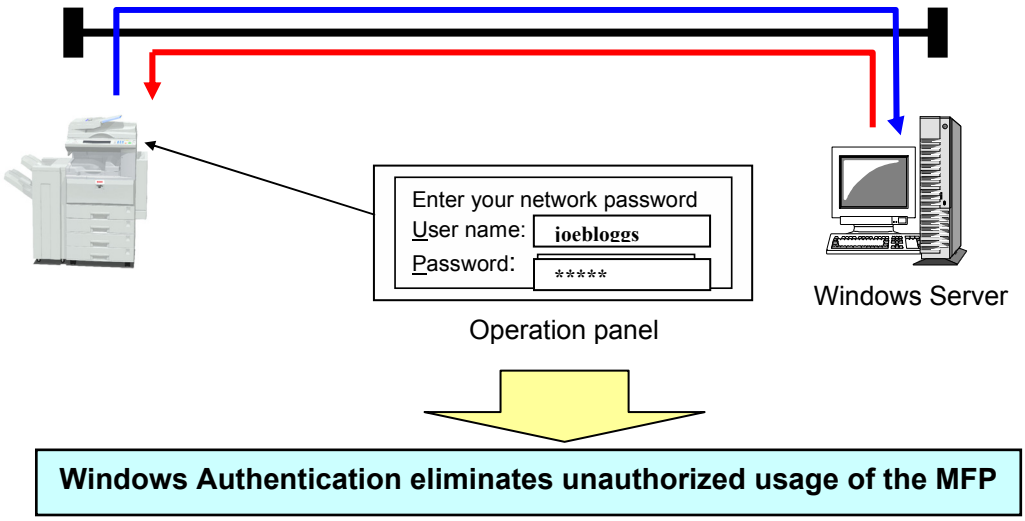
Windows Authentication

New

Windows Authentication authenticates an individual user who has their account on the directory server. This is done by using the existing Windows domain controller and network username and password. With Windows Authentication, customers can limit access to any or all applications by individuals or groups registered in the directory server. Here again, the benefits are that Windows Authentication uses the existing Windows network login infrastructure. This satisfies the IT manager, as there is no additional login-password required. The users are also happy, as they do not need to remember an additional password.

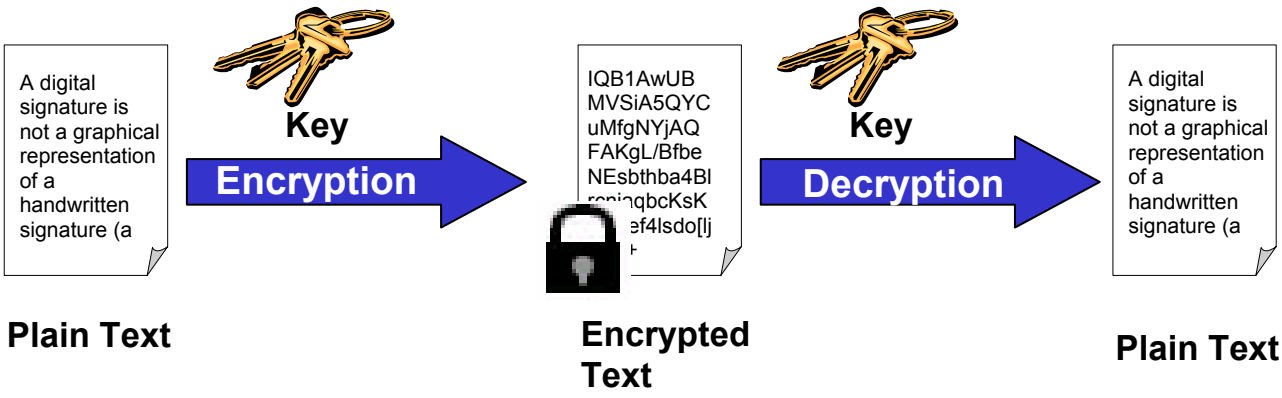
Summary of Customer Benefits of Windows Authentication

- Eliminates unauthorised use of the machine
- Can limit access to any or all applications
- Utilises the existing Windows Network login infrastructure
- Eliminates “from” field spoofing
- IT Manager: no additional login-password system to register
- Users: no additional password to remember



Encryption New

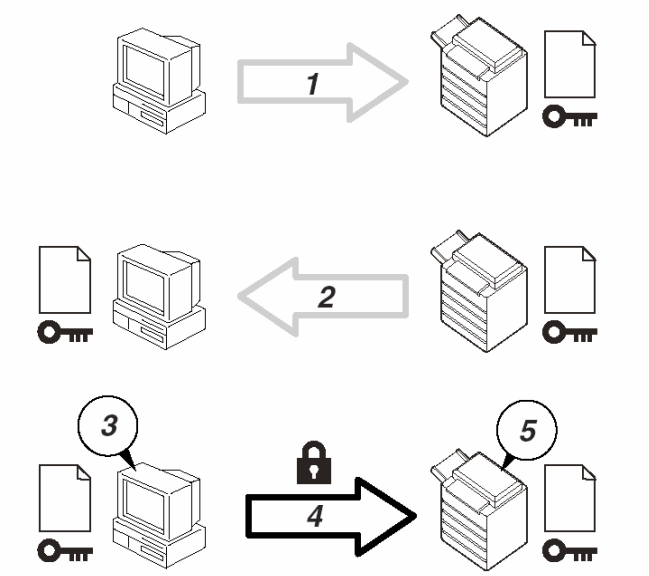
Simply put, encryption is the translation of data into a secret code to protect it from being stolen. To use any of the encryption functions, the IS 2235/45 must be equipped with the printer/scanner unit.


A digital signature is not a graphical representation of a handwritten signature (a
Key
Encryption
IQB1AwUB MVSiA5QYC uMfgNYjAQ FAKgL/Bfbe NEsbthba4Bl
Key
Decryption
A digital signature is not a graphical representation of a handwritten signature (a
Plain Text
Encrypted Text
Plain Text

Communication Path Protection by SSL (Secure Socket Layer)

SSL Encryption is the protocol that creates a secure connection between the client PC and the server. This is the protocol that is used for online credit card transactions. SSL Encryption ensures that data is protected from interception, tampering with or analysis.

When accessing the machine using a Web browser, IPP, or SmartDeviceMonitor for Admin, customers establish encrypted communication as described in the following flowchart.



1. When accessing the machine from a user's PC, the user's PC requests the SSL server certificate and public key from the machine
2. The server certificate and public key are sent from the machine to the user's PC. There are 2 types of server certificate: self-signed, or one that is issued by a certificate authority
3. By using the public key, the data is encrypted and ready for transmission
4. The encrypted data is sent to the machine
5. The encrypted data is decrypted using the private key

SNMPv3 Encrypted Communication (Simple Network Management Protocol)

SNMPv3 is the protocol that governs network management, and monitoring of devices on the network. This protocol is used to prevent interception of data by unauthorized users who could use this data to tamper with the machine or network settings. SNMPv3 encryption can be used by customers when encrypting communication via SmartDeviceMonitor for Admin.

Encrypt Data in the Address Book

Even if the HDD is removed from the MFP, disposed of or stolen, the data in the address book is protected by encryption and cannot be read. The User Administrator can set this function.

Driver Encryption Keys

By setting up the same encryption keys for both machine and users' printer drivers (PCL & RPCS), it is possible to encrypt the user authentication login password. Users register the encryption key to their printer drivers so that they can prevent login passwords from being analyzed. In the case of PDF passwords, users register their password to DeskTopBinder Lite when using PDF Direct Print.

HDD Data Protection

DataOverwriteSecurity (DOS) Unit

Most of our current MFPs have a built-in HDD and many of the functional capabilities are processed through the HDD. However, the latent image data remains as temporary data in the HDD after the completion of jobs. Confidential information therefore can potentially be retrieved or stolen. To address this problem, a DOS Unit Type D has been introduced.

The DOS solution was designed to meet mainly government, military and large major accounts' requirement for document security while using digital copiers. The DOS Unit conforms to ISO Standard 15408 which is the United States National Security Agency's (NSA) recommended method of managing classified documents and securing sensitive information.

The DOS erases the temporary data on the HDD by writing over it after completion of jobs. The DOS unit Type D is drastically improved over Types A and B. With Type D, it is now possible to overwrite temporary data from the scanner and document server function.

	DOS unit Type D	DOS unit Types A&B
Copy functions	**Yes**	Yes
Printer functions	**Yes**	Yes
Sample/Locked Print jobs	**Yes**	Yes
New functionality:		
Scanner functions	**Yes**	No
Document Server functions	**Yes**	No
Paperless/Server less fax data	**Yes**	No
File Format Converter functions	**Yes**	No
PS3 functions	**Yes**	No

In addition to above improvements, it is possible to completely overwrite all the data in the HDD with the DOS unit Type D. The overwriting starts immediately once a copy, print or scanner job is completed. This function meets customer needs when disposing of the machine or moving it to another section, all data in machine being overwritten.

The DOS unit employs two methods of overwriting the data on the Hard Disc Drive:

- Auto Erase Memory erases the temporary data on the hard disc from copier, scan or print jobs, by writing over it. The data stored in the address book is not overwritten, but can be encrypted for security.
- Erase All Memory writes over all the data on the hard disc. This is useful if the machine is relocated or disposed of. By using this function, the following items are erased.
  - Documents stored by the user in the Document Server using the Copier, Printer or Scanner functions
  - Information registered in the Address Book
  - User codes and the counters under each user code
  - Network settings
  - User stamps
  - Printer fonts downloaded by the user

Overwrite Method
With the DOS unit Type D, customers can chose from three overwrite methods (for both Auto Erase and Erase All Memory):

- NSA (National Security Agency, USA) – this is the default setting
  - Temporary data is overwritten twice with random numbers and once with zeros
- DoD (Dept of Defence, USA)
  - Temporary data is overwritten with a fixed value, the fixed value's complement, random numbers, and then verified
- Random Data Overwrite
  - Temporary data is overwritten multiple times with random numbers. The number of overwrites can be between 1 and 9 (the default is 3).

Document Server Security

Stored files in the HDD can be protected from unauthorised access and editing by limiting access rights. File owners and file administrators can set this function (the default access level for the owner is "Full Control".

Scan Security

To prevent data leaks, customers can limit the use of the scanner by specifying who is allowed to scan documents, and also to where the scanned documents may be sent. For example, customers can disable the use of adding e-mail addresses, so that files can only be sent to users registered in the address book.

Network Port Protection

To prevent illegal access to the network, specific ports such as SNMP or FTP can be closed. The benefit to customers is the prevention of the following threats:

- Destruction, corruption or modification of the file system
- Possibility of acting as a server for relaying viruses
- Possibility of successful DoS (Denial of Service) Attack
- Theft of user name or password

SERVICE FACTORS

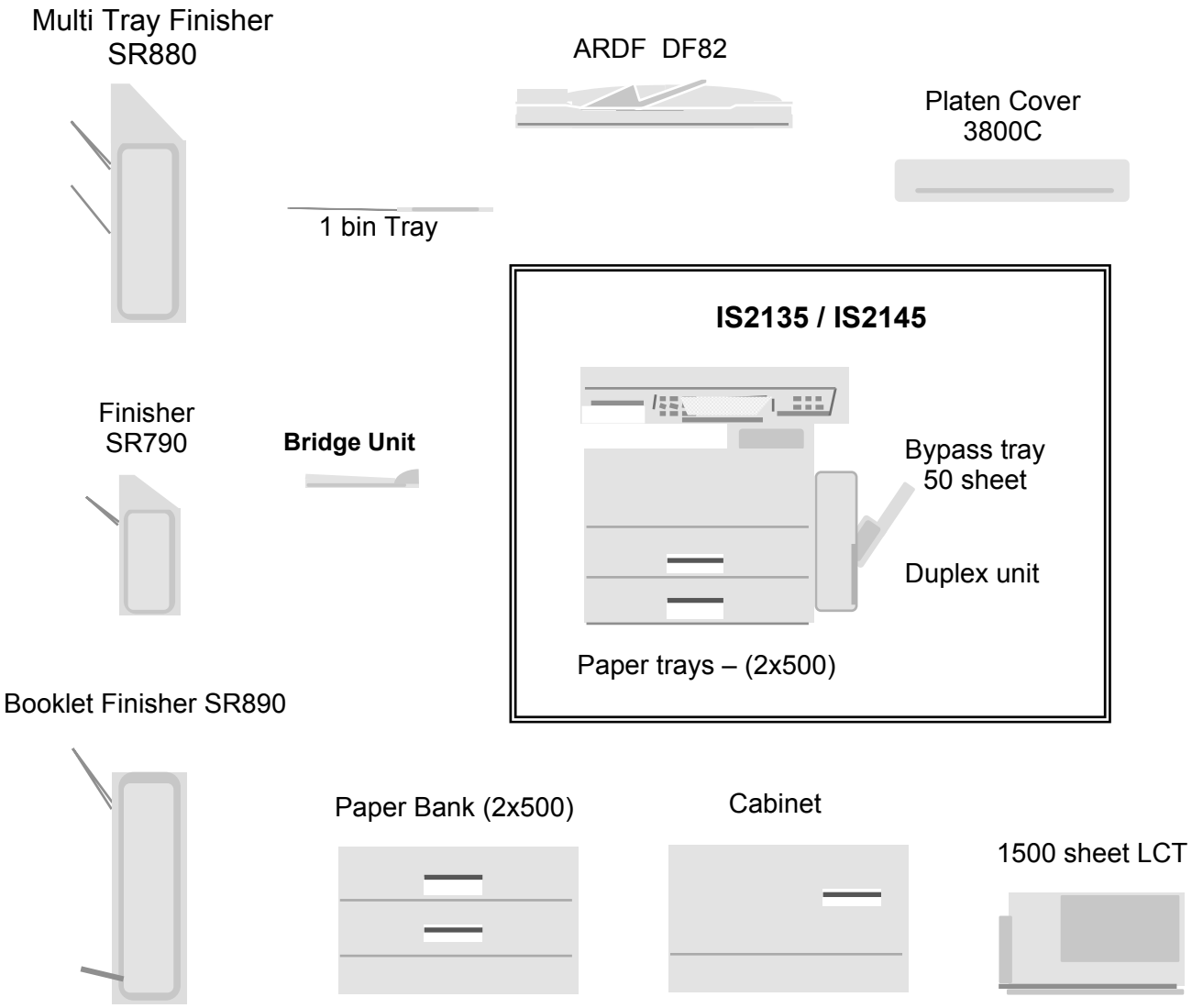
Target Reliability

Target Monthly Print / Copy Volume	IS2235	IS2245
ACV	10K	20K
Max CV Print	50K	50K
Duty (/month)	200K	200K
PM Interval	150K	150K
EM Interval (MCBF)	75K	75K
MCBC	50K	50K
Unit Life	5 yrs or 3000K prints, whichever comes 1st	5 yrs or 3000K prints, whichever comes 1st

OEM Equivalents

Infotec	Ricoh	Nashuatec	Rex Rotary	Gestetner	*Lanier*
IS2235	Aficio 3035	DSm 735	DSm 735	DSm 735	LD235
IS2245	Aficio 3045	DSm 745	DSm 745	DSm 745	LD245

CONFIGURATIONS & PART NUMBERS



NB: There is no mailbox and no external tray option with this model

ADDITIONAL OPTIONS

COPIER	FAX	PRINTER/SCANNER
Copy Data Security Unit Punch Unit (2/4 hole) User code enhance NVRAM Key counter bracket	Fax kit Additional G3 port unit 32MB SAF Memory Fax stamp marker ink	256MB Memory Postscript 3 IEEE 1284 Parallel Interface Wireless LAN interface IEEE 1394 interface Bluetooth File Format converter Data Overwrite Security Unit

ITEM	PART No.	COMMENTS
IS2235	890 101 24	Basic Copier (35 CPM) Includes 2 x 500 sheet paper trays 50 sheet bypass Duplex 128 MB RAM 40 GB Hard Disk Drive Toner and developer must be ordered separately NB: Every machine requires:Operator instructions/ Document feeder or platen cover, Paper bank or cabinet
IS2245	890 101 25	Basic Copier (45 CPM) SEE ABOVE FOR FURTHER DETAILS
O/I Kit English	890 516 73	Must be ordered separately
O/I Kit Dutch	890 516 78	"
O/I Kit Swedish	890 516 79	"
O/I Kit Norwegian	890 516 80	"
O/I Kit Danish	890 516 81	"
O/I Kit Finnish	890 516 82	"
Fax Cable Kit	889 931 59	Required for every fax option for machines in the UK
ARDF (DF82)	890 202 45	80 Sheet Document Feeder Every machine needs a DF or platen cover
Platen Cover type 3800C	890 300 03	Platen Cover – every machine needs a DF or platen cover
Bridge Unit Type 2045	890 201 46	The bridge unit is required if the machine is fitted with a finisher. It transports the paper into the external device
1-Bin Tray PT PT330	890 302 05	Provides an additional output tray, inside the centre of the machine, can be used to separate output from different sources (ie print, copy, fax) Capacity of tray is 125 sheets (80 gsm)
Multi Tray Finisher SR 880	890 201 41	2 tray finisher- both offering shift sort facility: Offsets and staples 50 sheets in 4 positions Upper tray holds up to 500 sheets Lower tray holds up to 2000 sheets or 1500 in multi-tray mode
Finisher 1000 SR 790	890 200 76	1000 sheet finisher Offsets and staples – 3 positions, 50 sheets (A4)
Booklet Finisher SR890	890 201 42	1000 sheet finisher Offsets and staples – 4 positions, 50 sheets (A4) Saddle-stitch and fold booklets up to 15 sheets = 60 pages. Booklet size: A5 or A4
NB: A bridge unit and PS530 are required with every finisher.		
Paper Bank PS530	890 201 43	2 x 500 (A4) sheet additional paper bank A5 SEF-A3, 60-105 gsm
LCT RT 45	890 201 44	1,500 (A4) sheet additional paper tray A4 only 60-105 gsm Is fitted to the cabinet or the PS530
Cabinet	890 303 79	Required if PS530 is not fitted
Punch Kit Type 1045	890 300 46	Punch kit – allows the user to select 2 or 4 hole punch Available only with finisher SR880
Punch Kit Type 1045SC	890 300 47	4 hole punch unit for Sweden only Available only with finisher SR880

ITEM	PART No.	COMMENTS
Fax Option Type 3045	890 303 62	Allows the unit to be used as a high-speed fax machine, with a modem speed of 33.6 Kbps To use LAN-fax functionality, printer/scanner unit is required An ARDF 82 is recommended.
G3 Interface Unit Type 3045	890 303 63	Additional Group 3 fax port, allowing 2 lines to work simultaneously – it is possible to install 2xG3 interface to provide up to 3 lines Requires Fax Option Type 3045
SAF Memory Type B	889 983 51	32MB SAF Memory – allows storage of approx 2,240 pages
Printer / Scanner Unit Type 3045	890 303 61	Upgrades the main machine to a printer and scanner, comes with Network Interface Board and USB 2.0 as standard NB: a printer kit and a 256 MB memory are needed for each printer / scanner
256 MB Memory Unit Type E	890 303 41	Required for the Printer / Scanner Unit
PostScript 3 Unit Type 3045	890 303 64	Adobe Postscript Level 3 Allows printer to be used with a MAC and provides faster printing of PDF files Requires Printer/Scanner & 256MB Memory
IEEE 1394 Firewire Interface Unit Type B	890 301 96	Firewire – connectivity option – requires Printer/Scanner
IEEE 802.11b Wireless LAN Interface Type H	890 303 40	Wireless LAN connectivity option – requires Printer/Scanner
Bluetooth Unit Type 3245	890 303 21	Bluetooth connectivity option – requires Printer/Scanner
IEEE 1284 Interface Unit Type A	890 302 77	Parallel connectivity option – requires Printer / Scanner
NV RAM - Type E	890 303 44	For increasing the number of user codes from 100 to 500s.
DataOverSecurity Unit Type D	890 303 20	
File Format Converter Type B	890 201 62	Allows the user to download print & copy files from the Document Server to a PC.
Copy Data Security unit Type A/3045	890 303 69	Prevents unauthorised copying of printed material
Scanner Accessibility Unit Type 3045	890 303 70	
Key Counter Bracket Type H	889 987 62	Allows a key counter to be fitted
CONSUMABLES		
Toner Black Type 2045/I	890 400 75	Yield: 30,000 pages /bottle - A4, 6% chart
Developer Black Type 2045/1	890 400 74	Yield: 300,000 pages/cartridge - A4, 6% chart
OPC Drum 43/I	885 982 17	150,000 pages/drum
Staples XI/1 (Set cartridge)	885 958 18	1x5000 for SR790/SR880 includes: cartridge for loading staples plus staples (Cartridge to be kept for refilling)
Staples XI/2 (refill)	885 958 19	3x5000 for SR790/SR880 Staple packs for refilling cartridge above
Staples VI	885 973 93	4x2000 for SR890 normal stapling
Staples IX	885 983 46	5x5000 for SR890 saddle-stitch stapling
Fax Stamp Ink Type 30	885 967 88	Requires ARDF to be fitted as well as Fax option – allows, marking of faxes which have gone through the ARDF

Option Correlations

IS2235/45 If you purchase	1. ARDF	2. Platen Cover	3. 1000 Sheet Finisher	4. Multi Tray Finisher	5. Booklet Finisher	6. Paper Bank	7. LCT	8. 1 Bin Tray	9. Bridge	10. Punch Unit	11. Fax Unit	12. G3 Interface	13.Handset	14.SAF Memory 32MB	15. Printer/Scanner	16.PS3	17.IEEE 1284*	18.IEEE 1394*	19.Bluetooth*	20. Wireless LAN*	21.256MB Memory	22. NV RAM	23. File Format Converter	24. DOS Unit	25. Copy Data Security	26.Scanner Accessibility Unit
1. ARDF		X																								
2. Platen Cover	X																									
3. 1000 Sheet Finisher				X	X	M			M																	
4. Multi Tray Finisher			X		X	M			M																	
5. Booklet Finisher			X	X		M			M																	
6. Paper Bank																										
7. LCT						M																				
8. 1 Bin Tray																										
9. Bridge Unit			M	M	M																					
10. Punch Unit			X	M	X																					
11. Fax Unit																									X	
12. G3 Interface											M														X	
13. Handset											M														X	
14. SAF Memory 32MB											M														X	
15. Printer/Scanner																					M					
16. PS3															M						M					
17. IEEE1284 *															M			R	R	R	M		R			
18. IEEE1394 *															M		R		R	R	M		R			
19. Bluetooth *															M		R	R		R	M		R			
20. Wireless LAN *															M		R	R	R		M		R			
21. 256MB Memory																										
22. NV RAM																										
23. File Format Converter *															M		R	R	R	R	M					
24. DOS Unit																										
25. Copy Data Security											X	X	X	X												
26. Scanner Accessibility Unit																										

X Cannot be installed together M Must be installed together R Refer to notes below

Notes:

1* Only 2 out of 5 of these items can be installed
(Although Bluetooth & Wireless LAN Cannot be installed together)

PRODUCT SPECIFICATIONS

Mainframe Specification

Feature		Specification
Scanning Element		Flatbed with moving CCD array image-sensor
Print Process		Twin Laser beam scanning & Electro-photographic printing.
Resolution		600dpi
Memory		Standard 128MB Max 384MB with Printer/Scanner Option
HDD		Standard 40GB
Warm-up time **(From main switch)**		IS 2235: 15 seconds IS 2245: 20 seconds
Recovery Time **(From Auto Off Mode)**		IS 2235: 10 seconds IS 2245: 15 seconds
Multiple copy		Up to 999 (Default: 999)
1st copy speed		IS 2235: 4.3 sec. IS 2245: 3.6 sec. (A4 / LT long edge feed from first input tray to internal tray, no reduction/ enlargement)
Continuous copy speed		IS 2235: 35 cpm (A4/LT long edge feed, No R/E -19 cpm A3/DLT) IS 2245: 45 cpm (A4/LT long edge feed, No R/E - 22 cpm (A3/DLT
One to one copy speed		IS 2235: 35 cpm (A4/LT long edge feed, No R/E) IS 2245: 45 cpm (A4/LT long edge feed, No R/E)
Input Capacity	**Standard**	500 sheets tray x 2 & 50 sheet bypass tray
	Options	Paper Bank: 500 sheet tray x 2 LCT: 1500 sheets
Output Capacity	**Standard**	Internal Tray: 500 sheets With Bridge Unit : 250 sheets
	Options	1 Bin Tray: 125 sheets Finisher 1000: Max 1,000 sheets Saddle-stitch Finisher: Proof Tray : 150 sheets Shift Tray : 1,000 sheets Multi Tray Finisher: Upper tray : 500 sheets Lower tray Default : 2,000 sheets Multi tray mode: 1,500 sheets Mailbox : Not Available External tray: Not Available

Feature		Specification
Paper size / weight	**Size:**	Trays: A5 SEF – A3/ 5 1/2" x 8 /2"– 11" x 17" Bypass:A6SEF–A3/5 1/2" x 8 1/2"– 11" x 17" LCT: A4/ LT Duplex: A5 SEF – A3/ 5 1/2" x 8 1/2" – 11" x 17"
	Weight:	Paper Trays 1 & 2 : 64 g/m^2 - 105 g/m^2 (20-28 lbs) Trays 3 & 4 : 60 g/m^2 - 105 g/m^2 (16-28 lbs) LCT : 60 g/m^2 - 105 g/m^2 (16-28 lbs) Bypass: 52 g/m^2 – 163 g/m^2 (16-44 lbs) (44 lbs = 90 Index) Duplex : 64 g/m^2- 105 g/m^2 (20-28 lbs)
Gray Scale		256 levels
Enlargement		115, 122, 141, 200, 400%
Reduction		93, 82, 75, 71, 65, 50, 25%
Zoom		25% - 400% in 1% step
Image density Adjustment		Manual or automatic
User code		100 codes (Max. 500 codes with optional "User Account Enhance Unit")
Display Languages		English, French *German, Italian, Spanish, Dutch, Swedish, Norwegian, Danish, Finnish, Portuguese, Polish, Hungarian, Czech and Russian are provided by FTP server
Control panel		Symbols
Dimensions (WxDxH):		Approx. 670 x 650 x 720 mm (26.3" x 25.6" x 28.3")
Weight:		Less than 79 kg (174 lb)
Rating power spec.:		200V model: 220-240V, 50/60Hz
Power consumption:		Less than 1.50 KW

Copier Specification – Enhanced Features

Feature	Specification
Auto Paper Selection	Standard
Auto Magnification Selection	Standard
Auto tray switch	Standard
Directional magnification (%)	Standard
Directional size magnification (inch/mm)	Standard
Series copy – Book to Simp.	Standard
Series copy - Dup. to Simp.	Standard
Photo mode	Standard (photo mode, text / photo mode)
Auto start	Standard
User program	Standard (10 modes)
Combine: 2 in 1 simplex	Standard
Combine: 4 in 1 simplex	Standard
Combine: 4 in 1 duplex	Standard
Combine: 8 in 1 simplex	Standard
Combine: 8 in 1 duplex	Standard
Combine: 16 in 1 duplex	Standard
Booklet Copy	Standard
Magazine Copy	Standard
Double copy	Standard
Erase center / boarder	Standard
Stamp / User Stamp	Standard - Page No., Date, Background numbering, User Stamp, Preset Stamps
Electronic sort / Rotate Sort	Standard
Repeat copying	Standard
Image rotation	Standard
Archive File	Document Server
Cover insertion	Standard
Paper designate	Standard
OHP slip sheet	Standard
Stapling	1000 Finisher: 2staple/1positions Multi Tray Finisher: 4 positions Booklet Finisher: 4 positions
Margin adjust	Standard
Bypass feed	Standard

Productivity Data

First Copy Speed: (Seconds)

		ISC2235			ISC2245		
		A3	A4	A4 (SEF)	A3	A4	A4 (SEF)
Contact Glass	Tray 1	5.2	4.0	4.5	4.2	3.3	3.7
	Tray 2	5.6	4.3	4.9	4.4	3.5	3.8
	Tray 3	6.1	5.0	5.5	4.8	3.9	4.4
	Tray 4	6.7	5.5	6.1	5.3	4.4	4.8
	LCT	-	5.0	-	-	3.9	-
ADF Simplex to Simplex	Tray 1	6.0	4.9	5.3	5.0	4.1	4.5
	Tray 2	6.3	5.2	5.7	5.2	4.2	4.6
	Tray 3	6.9	5.8	6.3	5.6	4.7	5.1
	Tray 4	7.5	6.3	6.8	6.1	5.2	5.5
	LCT	-	5.7	-	-	4.7	-
ADF Simplex to Duplex	Tray 1	13.7	10.4	11.8	11.6	8.8	10.0
	Tray 2	13.8	10.5	11.9	11.6	8.9	10.0
	Tray 3	14.4	11.2	12.5	11.9	9.1	10.4
	Tray 4	14.9	11.7	13.1	12.4	9.6	10.8
	LCT	-	11.1	-	-	9.2	-
ADF Duplex to Duplex	Tray 1	14.6	11.4	12.8	12.5	9.8	11.0
	Tray 2	14.6	11.4	12.8	12.5	9.8	11.0
	Tray 3	14.6	11.4	12.8	12.5	9.9	11.0
	Tray 4	14.6	11.4	12.7	12.6	9.8	11.0
	LCT	-	11.4	-	-	9.8	-

Continuous Speed

		ISC2235			ISC2245		
		A3	A4	A4 (SEF)	A3	A4	A4 (SEF)
Contact Glass Simplex	Tray 1	19	35	27	22	46	35
	Tray 2	19	35	27	22	45	35
	Tray 3	19	35	27	22	46	35
	Tray 4	19	35	27	22	45	35
Contact Glass Duplex	Tray 1	13	35	28	16	46	36
	Tray 2	13	36	28	16	46	36
	Tray 3	13	35	28	16	46	36
	Tray 4	13	35	28	16	46	36

PERIPHERALS SPECIFICATIONS

ARDF – DF82

Feature		Specification
Original Size	Simplex	B6 SEF/LEF - A3 SEF 5 ½"x 8 ½ "(HLT) SEF/LEF – 11"x17"(DLT) SEF
	Duplex	A5SEF/LEF - A3 SEF 5 ½"x 8 ½ "(HLT) SEF/LEF – 11"x17"(DLT) SEF
Original Weight:	Simplex	40-128g/m^2 / 11-34lbs
	Duplex	52-105g/m^2 / 14-28lbs
Stack Capacity:		80 sheets with 80g/m^2 paper, or less than 11mm
Feeding Speed:		35 cpm (IS 2235), 45 cpm (IS 2245)
Power Consumption:		Less than 60 W (Power is supplied from mainframe)
Dimensions (WxDxH):		570x518x150mm
Weight:		Less than 12kg

Paper Bank – PS530

Feature	Specification
Paper Size:	A5 LEF -A3 SEF 5 ½"x8 ½" SEF – 11"x17" SEF
Paper Weight:	60-105g/m^2 / 20-28lbs
Paper Capacity:	500 sheet x 2 tray (with 80g/m^2 paper)
Noise (Power level):	Operating: less than 71 dB (full system) Stand-by: less than 40 dB (full system)
Power Consumption:	50W
Dimensions (WxDxH):	540 x 600 x 270mm
Weight:	Less than 25kg

LCT – RT45

Feature	Specification
Paper Size:	A4 (LEF), LT (LEF)
Paper Weight:	60 - 105 g/m^2, 20 - 28 lbs
Paper Capacity	1500 sheets
Noise (Power level):	Operating: less than 71 dB (full system) Stand-by: less than 40 dB (full system)
Dimensions (WxDxH):	390 x 500 x 390 mm, 15.4" x 19.7" x 15.4"
Weight:	Less than 17 Kg, 37.5 lbs.

Bridge Unit - Type 2045

Feature		Specification
Paper Size:	**Internal Tray**	A5 - A3, B6 SEF, A6 SEF, A4 (LEF), 8 ½" x 5 ½" - 11" x 17"
	To Finisher	A5 - A3, B6 SEF, A6 SEF, A4 (LEF), 8 ½" x 5 ½" - 11" x 17"
Paper Weight	**Internal Tray**	52 - 157 g/m^2 , 13.9 - 41.7 lbs
	To Finisher	52 - 157 g/m^2 , 13.9 - 41.7 lbs
Stack Capacity:		250sheet

One Bin Tray – PT280

Feature		Specification
Bin Capacity:		125 sheets (80 g/ m^2)
Paper Size:		A5 SEF - A3, 8 1/2" x 11" SEF - 11"X17"
Paper Weight:		60 - 105 g/m^2 , 16 – 28 lbs
Noise (Power Level)	**Operating**	Operating: less than 71 dB (full system)
	Stand-By	less than 40 dB (full system)
Power Consumption:		Less than 15W
Dimension (WxDxH):		470 x 565 x 140 mm
Weight:		Less than 4 kg

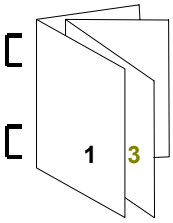
1000 Sheet Finisher – SR790

Feature		Specification
Paper Size:	**Proof Tray**	A3 – A6T,11" x 17" –8 1/2"x5 1/2"-HLT
	Shift Tray	A3-A5,11"x17" – 8 1/2 x 5 1/2"(HLT)
Paper Weight:	**Proof Tray**	60 - 157 g/m^2 (16 - 42lbs.)
	Shift Tray	60 – 157 g/ m^2 (16 - 42lbs)
Stack Capacity:	**Proof Tray**	250 sheets (A4 LEF, 8 ½" x 11" LEF or smaller)(80 g/m^2, 20.lb) 50 sheets (B4, 8 1/2" x 14" or larger)(80g/m^2, 20 lbs)
	Shift Tray	1000 sheets (A4 LEF, 8 1/2"x 11" or smaller) ((80 g/m^2 , 20.lbs) 500 sheets (B4, 8 ½" x 14" or larger) (80 g/m^2 , 20.lbs)
Staple Capacity:		50 sheets (A4, B5, 8 ½" x 11" or smaller) (80 g/m^2, 20. lbs) 30 sheets (A3, 11" x 17" or larger)
Staple Paper Size:		A3 - B5 LEF, LT - 11" x 17"
Staple Paper Weight:		64 - 90 g/m^2 , 17 - 20 lbs
Staple Position:		1 staple / 2 position 2 staple / 3 position
Shift Tray		Standard
Noise (Power level)		Operating: less than 64 dB (full system)
Power Consumption:		50W
Dimension (WxDxH):		527 x 520 x 790mm / 20.7"x20.5"x31.1"
Weight:		Approx. 25kg

Booklet Finisher – SR890

Feature		Specification
Upper Tray (Proof Tray)	Paper Size	A5 - A3, HLT - DLT
	Paper Weight	52 - 163 g/m2 , 14 - 43 lbs.
	Stack Capacity	150 sheets (A4LEF/B5LEF/A5LEF/ LT LEF/HLT LEF/HLT SEF) 75 sheets(A3SEF/B4SEF/A4SEF/B5SEF/DLT SEF/LG SEF/LT SEF)
Lower Tray: (Shift Tray)	Paper Size	A5 - A3, HLT - DLT
	Paper Weight	52 - 163 g/m2 , 14 - 43 lbs.
	Stack Capacity	1000 sheets (A4/B5LEF, LT/HLT LEF, HLT SEF) 500 sheets (A3/B4SEF, A4/B5SEF, DLT/LG SEF, LT SEF)
	Staple Capacity	50sheets (A4/B5LEF, LT/HLT LEF, HLT SEF) 30sheets(A3/B4SEF, A4/B5SEF, DLT/ LG SEF, LT SEF)
	Stapler Capacity	5,000 shots per cartridge (Type J)
	Staple Position	1 staple/2 positions, 2 staples/2 positions
Booklet Tray	Paper Size	A3SEF / A4 SEF / B5 SEF / DLT SEF / / LT SEF
	Paper Weight	60 - 80 g/m2 , 16 - 20 lbs.
	Stack Capacity	11-15 sheets folder: 10 sets 6-10 sheets folder: 15 sets less than 5 sheets folder: 25 sets
	Staple Capacity	15 sheets
	Stapler Capacity	2,000 shots per cartridge (Type E)
	Staple Position	Center 2 position
Power Consumption:		170W (Power is supplied from mainframe)
Dimensions (WxDxH):		68,9 x 62,3 x 105,5 mm, 27.1" x 24.5" x 41.5"
Weight:		50kg, 110.2ibs

Saddle stitch staple



Normal Staple

Top Bottom Left 2

Multi-Tray Finisher – SR880

Feature		Specification
Upper Tray	Paper Size	A6,B5,A5 - A3, HLT - DLT
	Paper Weight	52 - 163 g/m2 , 14 - 43 lbs.
	Stack Capacity	500 sheets (A4/ LT/B5/A5Y) 250 sheets (A3, B4, DLT, LG) 100 sheets (A5SEF, HLT)
Lower Tray: Normal Mode (Default)	Paper Size	A6,B5,A5 - A3, HLT - DLT
	Paper Weight	52 - 163 g/m2 , 14 - 43 lbs.
	Stack Capacity	2,000 sheets (A4LEF/ LTLEF) 750 sheets (A3, B4, A4 SEF, B5, DLT, LG, LT SEF,) 500 sheets (A5 LEF,) 100 sheets (A5 SEF, HLT) *Staple output on upper tray is not available in Default mode.
Lower Tray: Multi Tray Mode	Paper Size	A6,B5,A5 - A3T, HLT - DLT
	Paper Weight	52 - 163 g/m2 , 14 - 43 lbs.
	Stack Capacity	1,500 sheets (A4LEF/ LTLEF) 750 sheets (A3, B4, A4 SEF, B5, DLT, LG, LT SEF,) 500 sheets (A5 LEF,) 100 sheets (A5 SEF, HLT)
Staple Capacity: (with 80g/m^2 paper)		50 sheets (A4 / 8 ½”x11”(LT) or smaller) 30 sheets (B4 / 8 ½”x14”(LG) or larger)
Staple Paper Size:		B5 SEF/LEF -A3 SEF 8 ½”x11” (LT) SEF/LEF – 11”x17”(DLT) SEF
Staple Paper Weight:		64-90g/m^2
Staple Position:		1 staple / 3 positions (Top, Top Slant, Bottom) 2 staples / 1 position (Left2 / Top2)
Stapler Capacity:		5,000 shots per cartridge
Power Consumption:		60W (Power is supplied from mainframe)
Dimensions (WxDxH):		680 x 620 x 1,030mm
Weight:		53kg, 116ibs

Punch Kit for EU 2/4 hole (for SR880 Only)

Feature		Specification
Paper size	2 Hole	SEF: A3-A5, DLT-HLT LEF: A4-A5, LT-HLT
	4 Hole	SEF: A3, B4, DLT LEF: A4, B5, LT
Paper Weight		2 hole version :52 - 163 g/m^2, 14 – 43 lbs 4-hole version :52 – 163 g/m^2, 14 - 43 lbs
Dimensions (WxDxH)		142 x 456 x 92 mm
Weight		2.9 Kg

Punch Kit for Scandinavian 4 hole (for SR880 Only)

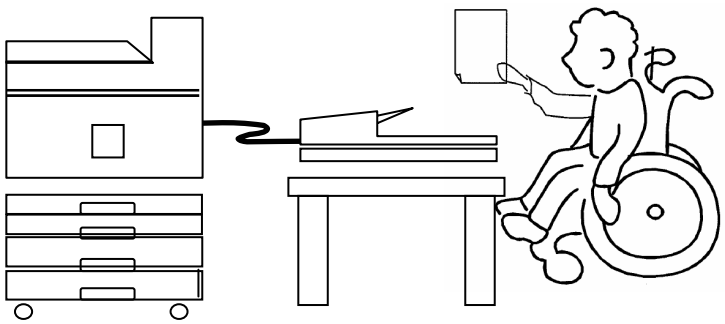
Feature		Specification
Paper size	**4 Hole**	SEF: A3-A5, DLT-HLT LEF: A4-A5, LT-HLT
Paper Weight		52 – 163 g/m^2, 14 - 43 lbs
Dimensions (WxDxH)		142 x 456 x 92 mm
Weight		2.9 Kg

Scanner Accessibility Option – Type 3245

This unit allows users to operate the machine or scan documents from the side, instead of using the control panel on the machine. It has been developed to comply with Section 508 of the U.S.A. Rehabilitation Act.

Feature	Specification
Position:	On the right side of the mainframe (Please see picture below)
Length of Connector cable:	1.8m
Power Consumption:	Power is supplied from mainframe
Dimensions (WxDxH):	With ARDF (W)600 x (D)640 x (H)250 Without ARDF (W)600 x (D)640 x (H)100
Weight:	25.7Kg 13.7Kg
Included:	a cable which connects the mainframe and scanner -a lid which covers the mainframe when scanner is removed

Image: After the scanner is separated from the mainframe



Printer

Feature			Specification
CPU			RM7035C-466 466MHz
RAM	Std.		384MB (Resident:128MB + Additional 256MB) Additional 256MB memory is mandatory for printing
Hard Disk	Std.		40GB
PDL	Std.		PCL5e, PCL6, RPCS
	Option		Adobe PostScript3
Print Resolution	Max		600 dpi x 600 dpi (2400 dpi equivalent x 600 dpi with smoothing)
	Engine		600x600/ 300x300/ 200x200 (dpi)
	Controller	PCL5e	300x300/ 600x600 (dpi)
		PCL6	600x600 (dpi)
		RPCS	200x200/600x600 (dpi)
		PS3 (Option)	300x300/ 600x600 (dpi)
	Drivers	PCL5e	300x300/ 600x600 (dpi)
		PCL6	600x600 (dpi)
		RPCS	200x200/ 300x300/ 600x600 (dpi)
		PS3 (Option)	600x600 (dpi)
Fonts	Std.		PCL: 59 fonts (TrueType :10 fonts, Intellifont: 35 fonts, International font: 13 fonts, Bitmap fonts: 1 font)
	Option		PS3: 136 Adobe PostScript Type 1 fonts
Connectivity	Host Interface	Std.	RJ-45 network port (100BASE-TX/10BASE-T), USB2.0
		Option	IEEE1394, Wireless LAN (IEEE802.11b), Bluetooth, Parallel Port IEEE 1284
	Network Protocol		TCP/IP, IPX/SPX, SMB (NetBIOS over TCP/IP), AppleTalk (Auto Switching)
	DDNS Support	Related Protocol	TCP/IP
		Support server	See detail below.
	MIB support		MIB-II(RFC1213), HostResource(RFC1514), PrinterMib(RFC1759) Ricoh Private MIB (Ricoh Original)
	Network/Operating Systems		Windows 95/98SE/NT4.0/2000/Me/XP/Server 2003 Netware 3.12, 3.2, 4.1, 4.11, 5.0, 5.1, 6, 6.5 Unix; Sun Solaris, HP-UX, SCO OpenServer, RedHat Linux, IBM AIX Mac OS 8.6-9.2x, OS X 10.1 or later

*Memory and HDD are shared with other applications

DDNS (Dynamic Domain Name System) Support

DDNS records (**) managed by the DNS server will be dynamically renewed.
Without DDNS, manual renewal of records is required when the DNS client's IP address is changed.
(**) There are two types of records, mapping information as follows;
1."A" record for host name to IP address
2."PTR" record for IP address to host name.

Customer benefits
With the conventional DNS function, name resolution does not work in the following cases.
1.Change of IP address for MFP
2.Change of Device Name for MFP
With the DDNS function, above changes will be automatically notified to DNS server, name resolution work even after these changes.
Support Server
1.DNS server
a. Static IP setting
-"Microsoft DNS Server" of Windows 2000 Server
-BIND 8.2.3 later
b. DHCP setting
i. In case of renewal of "A" record by MFP
-"Microsoft DNS Server" of Windows 2000 Server
-BIND 8.2.3 later
ii. In case of renewal of "A" record by DHCP
-"Microsoft DNS Server" of Windows 2000 Server
-BIND 8.2.3 later
-Standard DNS Server attached with NetWare 5 later
2.DHCP Server that can renew "A" record instead of MFP
-Microsoft DHCP Server of Windows 2000 Server SP3 later
-ISC DHCP 3.0 later
-Standard DHCP Server attached with NetWare 5 later

Language Support

Language	LCD Touch Panel	Print Driver			LAN-FAX Editor
		RPCS	PCL6c	PS3	
English	Y	Y	Y	Y	Y
German	Y	Y	Y	Y	Y
French	Y	Y	Y	Y	Y
Italian	Y	Y	Y	Y	Y
Spanish	Y	Y	Y	Y	Y
Dutch	Y	Y	Y	Y	Y
Swedish	Y	Y	Y	Y	Y
Norwegian	Y	Y	Y	Y	Y
Danish	Y	Y	Y	Y	Y
Czech	Y	Y	Y	N	Y
Hungarian	Y	Y	Y	N	Y
Finnish	Y	Y	Y	N	Y
Polish	Y	Y	Y	N	Y
Portuguese	Y	Y	Y	N	Y
Russian	Y	Y	Y	N	Y
Korean	Y	Y	Y	Y	Y
Simplified Chinese	Y	Y	Y	Y	Y
Traditional Chinese	Y	Y	Y	Y	Y

Printer Driver - Features

	PCL 5e / 6	RPCS	PostScript3				
			Windows 9x / Me	Windows NT4	Windows 2000 / XP	Mac OS 8.6-9.2	Mac OSX
Job Binding	N	Y	N	N	N	N	N
Send to Document Server	Y	Y	Y	Y	Y	Y	Y*1
Sample Print	Y	Y	Y	Y	Y	Y	Y*1
Locked Print	Y	Y	Y	Y	Y	Y	Y*1
Hold Print	Y	Y	Y	Y	Y	Y	Y*1
Stored Print	Y	Y	Y	Y	Y	Y	Y*1
Stored Print (Shared)	Y	Y	N	N	N	N	N
Reduce/Enlarge (Zoom/Scaling)	Y*2	Y	Y	Y	Y	Y	Y
Reduce/Enlarge Centering	Y *2	Y	N	N	N	N	N
Collate	Y	Y	Y	Y	Y	Y	Y
Layout (N-up)	Y	Y	Y	Y	Y	Y	Y
Poster	N	Y	N	N	N	Y	N
Duplex	Y	Y	Y	Y	Y	Y	Y
Booklet1	N	Y	N	N	N	N	N
Booklet2 (Magazine)	Y	Y	N	N	Y	N	N
Non-Reduction Booklet	Y	Y	N	N	N	N	N
Punch	Y	Y	Y	Y	Y	Y	Y
Staple	Y	Y	Y	Y	Y	Y	Y
Front Cover	Y	Y	Y*3	N	N	Y*3	Y*3
Back Cover	N	N	N	N	N	N	N
Front and Back Cover	Y	Y	N	N	N	N	N
Slip Sheet	Y	Y	Y	N	N	N	N
Chaptering	Y	Y	Y	N	N	N	N
User Defined Pages	Y	N	N	N	N	N	N
Tab Shift Printing	N	N	N	N	N	N	N
Fit to Print	Y	Y	Y	Y	Y	Y	N
Mirror Image Print	N	N	Y	Y	Y	Y	N
Negative Image Print	N	N	Y	Y	Y	Y	N
Dithering	N	Y	Y	Y	Y	Y	Y
Edge Smoothing	Y	Y	Y	Y	Y	Y	Y
Toner Saving	Y	Y	Y	Y	Y	Y	Y
Watermark	Y	Y	Y	Y *4	Y *4	Y	Y *4
Overlay	N	Y	N	N	N	N	N
Header/Footer	N	Y	N	N	N	N	N
Adjust image position	N	Y	N	N	N	N	N
Binding Margins	N	Y	N	N	N	N	N
User ID	Y	Y	Y	Y	Y	Y	Y*1
User Code	Y	Y	Y	Y	Y	Y	Y*1
Rotate Print	Y	Y	Y	Y	Y	N	N
Reverse Order Print	N	Y	N	N	Y	Y	Y
Do not print Blank pages	Y *5	Y	N	N	N	N	N
Edge to Edge Print	Y	Y	Y	Y	Y	Y	Y
Authentication	Y	Y	N	N	N	N	N
Encryption/Encoding	Y	Y	N	N	N	N	N
Unauthorized Copy Control	N	Y	N	N	N	N	N

Y: supported N: not supported
*1: Available with MAC OS X 10.2. or later
*2: “Centering” feature cannot be selected from the PCL driver. However, this feature is PCL’s default. When printing with the Reduce/Enlarge (Zoom) feature of PCL driver, the output will be automatically centered by the PCL ‘s original centering function.
*3: Same as “First page/Other pages” feature
*4: Custom “Watermark Name” is not available.
*5: This feature cannot be selected from the printer driver, but can be to “On” in “PCL setting” of the MFP

Supported Environments

Windows OS

OS	Type	PCL5e/6	RPCS	PostScript3
Windows 9x/Me	**-**	Yes	Yes	Yes
Windows NT	**WorkStation 4.0**	Yes *1	Yes	Yes *2
	Server 4.0	Yes *1	Yes	Yes *2
	Server 4.0 TSE (*6)	Yes *2	Yes	Yes *2
	Server 4.0 Enterprise Edition	No	No	No
Windows 2000	**Professional**	Yes	Yes	Yes *3
	Server (*6)	Yes	Yes	Yes *3
	Advanced Server (*6)	Yes	Yes *4	Yes *3
	Datacenter Server	No	No	No
Windows XP	**Professional**	Yes	Yes *5	Yes *3
	Home Edition	Yes	Yes *5	Yes *3
Windows Server 2003	**Standard**	Yes	Yes *7	Yes *3
	Enterprise	Yes	Yes *7 *4	Yes *3
	Datacenter Edition	No	No	No
	Web Edition	No	No	No

*1: Service Pack 6a or later is required
*2: Service Pack 6 or later is required
*3: Adobe has not released PS driver for Windows 2000 and XP. Only MS-PostScript driver is available and PPD file for MS-PS is included in the Driver CD.
*4: Cluster Server configuration is not supported.
*5: RPCS driver does not support "Fast User Switching" function of Windows XP.
*6: See 2) for Terminal Service and Citrix MetaFrame environment support
*7: On System environment with Windows Server 2003, the following printer driver functions have limitations.

RPCS Driver Function	Administrator	User
Custom Settings Icon	A	B
Add/Change Custom Settings	A	B
Manage Icons	A	B
Printer Configuration	A	B
Job Type	N/A	N/A
Overlay	N/A	N/A
Watermarks	A	B
Save/Restore Settings	N/A	N/A
User Settings	A	B
Custom Paper Size	A	B
Chaptering	N/A	N/A

A: Authorized for changing and registering
B: Access to use only

Point & Print

Window OS		Drivers		
Server	**Client (Push to)**	**PCL5c/6**	**RPCS**	**PS**
Windows Server 2003	XP	Yes	Yes	Yes
	W2K Pro	Yes	Yes	Yes
	NT4.0 WS	Yes	Yes	Yes
	98 / Me	Yes	Yes	Yes
Windows XP Professional	XP	Yes	Yes	Yes
	W2K Pro	Yes	Yes	Yes
	NT4.0 WS	Yes	Yes	Yes
	98 / Me	Yes	Yes	Yes
Windows 2000 Professional, Server & Advanced Server	XP	Yes	Yes	Yes
	W2K Pro	Yes	Yes	Yes
	NT4.0 WS	Yes	Yes	Yes
	98 / Me	Yes	Yes	Yes
NT4.0 Workstation & Server (Intel)	XP	No	No	No
	W2K Pro	Yes	No	No
	NT4.0 WS	Yes	Yes	Yes
	98 / Me	Yes	Yes	Yes

II) Terminal Service and Citrix MetaFrame

Server	Driver		
	PCL5c/6	**RPCS**	**PS**
Windows Server 2003	Yes	Yes	Yes
WIndows2000 Server	Yes	Yes	Yes
Windows NT4.0 TSE	Yes	Yes	Yes
Win 2003 Servers + MetaFrame	Yes	Yes	Yes
Win 2000 Servers + MetaFrame	Yes*1	Yes	Yes
Win NT4.0 TSE +MetaFrame	Yes	Yes	Yes

Operating Environments

The following combinations of operating system and Citrix MetaFrame are supported:

Windows NT Server 4.0 Terminal Server Edition.- with SP6 and later required

1. Windows Terminal Service (RDP protocol)
2. MetaFrame 1.8 SP3/FR1+SP3/SP4 (ICA protocol)
3. MetaFrame XP 1.0 SP1/SP2/FR1 (ICA protocol)

Windows 2000 Server /Advanced Server

1. Windows Terminal Service (RDP protocol)
2. MetaFrame 1.8 SP3/FR1+SP3/SP4 (ICA protocol) *1
3. MetaFrame XP 1.0 SP1/SP2/SP3/FR1/FR2/FR3 (ICA protocol)
4. MetaFrame PresentationServer3.0

Windows 2003 Server

1. Windows Terminal Service (RDP protocol)
2. MetaFrame XP 1.0 FR3 (ICA protocol)
3. MetaFrame PresentationServer3.0

*1: PCL mono-drivers do not support MetaFrame1.8 + SP3 Environment. Only mini-driver support Meta1.8+SP3 Environment.

Note:

Even if "Yes" is put into the cell, there is a chance that the driver is not supported under the combination of FR and Service Pack of MetaFrame.

Mac OS

	PostScript3	Printer Utility for MAC
Mac OS 8.6 or later (OS X Classic)	Yes	Yes
Mac OS X Native (v. 10.1 or Later) *1	Yes	Yes*2

*1: Mac OS X v.10.0.X is not supported. *2: Mac OS X v.10.2.0 is not supported.

UNIX Filter

Unix Platforms	Version
Sun Solaris	2.6 / 7 / 8 / 9 / 10
HP-UX	10.x / 11x / 11iv2
Red Hat Linux	6.x / 7.x / 8.x / 9.x / Enterprise
SCO OpenServer	5.0.6 / 5.0.7
IBM AIX	V4.3 & 5L Version 5.1/5.2/5.3

Supported Schedule: Oct 2005

Novell Netware

Netware Server	**Supported Version**	Netware 3.12 / 3.2 / 4.1 / 4.11 / 5.0 / 5.1 / 6.0 / 6.5
	Client OS	Windows 95 / 98 / Me / NT4.0 / 2000 / XP (Professional)
NDPS Gateway	**Supported Server OS**	Netware 5.1 (SP8 or later) / 6.0 (SP5 or later) / 6.5 (SP3 or later)
	Supported Client OS	Microsoft Windows 98 SE with Novell Client 3.4 Microsoft Windows NT4.0 SP6A / 2000 SP4 / XP (Professional) SP2 with Novell Client 4.90 SP2
	Localization	English, German, French, Italian, Spanish

Supported Schedule: TBA

Scanner

Feature	Specification	
Optical Resolution:	600 dpi 256 shades of grey	
Scan Speed:	E-mail/Scan to Folder/Network delivery Scanner 52 ppm: A4 LEF/Text/200dpi, MH compression.	
Auto scan size detection:	Contact Glass	A3 SEF, B4 SEF, A4 SEF/LEF, B5 SEF/LEF
	ARDF	A3 SEF, B4 SEF, A4 SEF/LEF, B5 SEF/LEF, A5 SEF/LEF Foolscap SEF, B6 SEF/LEF, DLT SEF, LT SEF/LEF
Scan Area:	Main scan: 297mm, Sub scan: 432mm	
Compression Method:	TIFF (MH, MR, MMR) Grayscale: JPEG	
Network Topology:	Ethernet 10/100BaseTX IP over IEEE 1394 Wireless LAN (802.11b)	
Protocol:	Network: TCP/IP, IPX Network Twain: SNMP, rsh Sending E-mail: SMTP, POP3 Scan to Folder: SMB, FTP, NCP	
Memory:	384MB(Mainframe Std.128MB + Printer Scanner Unit 256MB)	
Scanned Stamp (with ADF):	Yes (new)*1	

*1: Scanned Stamp marking is indication that the original has been scanned, not has been sent. It is the same stamp in fax scanning.

Scan to E-mail

Feature		Specification	
Requirement:		SMTP (Mail Server) Gateway and TCP/IP	
Authorization function:		SMTP authentication POP before SMTP authentication	
Resolution:		100dpi, 200dpi (Default), 300dpi, 400dpi, 600dpi	
Register E-mail address in HDD:		Max. 2,000 addresses	
Register Group address in HDD:		Max. 100 Group (Max. 500 addresses in one group address)	
Maintain E-mail address in HDD:		Direct input on operation panel, WebImageMonitor , SmartDeviceMonitor	
Destination E-mail address input via soft key:		Yes, Max. 100 destinations per job	
Search E-mail address in HDD:		By name and E-mail address	
LDAP:		Yes (not synchronize)	
Max. address numbers per send:		Max. 500 addresses per send	
Address numbers per send:		Address from HDD address book *1	Max. 500
		Address directly input via soft key *1 *2	Max. 100
		Address looked up via LDAP *1 *2	Max. 100
Attention:		to, cc, bcc	
Subject:	**Manual Input**	Max. 128 Characters via soft key	
	Pre-register by user	22 subjects (Default 2 subjects, Total 24subjects) Max. 20 characters per a subject	
Body Message:	**Manual Input**	Max. 80 Characters via soft key	
	Pre-register by user	5 body messages. 80 characters x 5 lines per a body message Title name of the body message: Max. 20 characters per a name	
	Preset	Message: “This e-mail included attached file sent from xxxx(machine model name).”	
E-mail Size:		128 – 102,400KB, Default=2,048KB	
File type:		Single Page TIFF/JPEG, Single Page PDF, Multi Page TIFF, Multi Page PDF	
Program User Setting:		Yes (up to 10 programs)	
Divide and send e-mail:		Yes (By page or size) / No, Default = Yes(By size) *3	
Resend:		Yes (by page or size) / No, Default=Yes	

*1: Address from HDD address book + Address input via soft key + Address looked up via LDAP = Max.500
*2: Address directly input via soft key + Address looked up via LDAP = Max. 100
*3: If the sent file size exceeds the maximum E-mail size, it will be divided into multiple sendings. In addition, the sent files are limited by the receiving device due to the limitation in the receiving capacity at the receiver SMTP server or E-mail software setting.

Scan to Folder

Feature	Specification
Protocol Support:	SMB (Server Message Block), FTP (File Transfer Protocol), NCP (NetWare Core Protocol)
Security:	Client folder log-in (log-in name and password) Encryption of log-in name and password during transmission
Resolution:	100dpi, 200dpi (Default), 300dpi, 400dpi, 600dpi
Register Client Folder Address in HDD:	Max. 2,000 folders
Register Group Address in HDD:	Max. 100 groups Registered destinations in one group: 50
Maintain Client Folder Address in HDD:	Direct input on operation panel, Web Image Monitor, Smart Device Monitor
Destination Client Folder Address Input via Soft Key:	Yes
Search Client Folder Address:	SMB: Network Browsing directly to the designated folders Manual input of network path FTP: Manual input of network path NCP: Network Browsing directly to the designated folders Manual input of network path
Max. Client Folder Numbers per Send:	Max. 50 client folders / PCs per send
Destination Combination:	Combination of Scan to Folder and Scan to E-mail: Max. 500 E-mail + Max. 50 Folders destinations e.g.) 50 client folders + 500 E-mail addresses: OK 51 client folders + 499 E-mail addresses: Fail 30 client folders + 500 E-mail addresses: OK (cannot set E-mail destination more than 500)
Input Subject:	No
Scan File Size:	MAX 2GB
File Size when combined Scan to Folder & Scan to E-mail:	128- 102,400kB, Default = 2,048KB (Scan to E-mail file size applied).
File type:	Single Page TIFF/JPEG, Single Page PDF, Multi Page TIFF, Multi Page PDF
Program User Setting:	Yes (up to 10 programs)
Dividing file in Scan to E-mail:	Yes (By page or size) / No, Default = Yes(By size) (When Scan to PC combine with Scan to E-mail)
Scanner Recall Interval Time:	60 - 900sec (Default: 300sec)
Number of Scanner Recalls:	On (1-99 (Default: 3 times)) / Off

Max. address numbers per sending (combination between E-mail and Folder)

	Input via	Condition 1: Max.address can select or input	Condition 2: Max. address allow in single operation	Condition 3: Combination of addresses: Max.
Scan to E-mail	**Address book**	500	500	550
	Manual input	100		
Scan to Folder	**Address book**	50	50	
	Manual input	50		

The number of destination which user can put has to satisfy all of above 3 conditions. User can combine E-mail and Folder destinations up to 550 destinations.

Network TWAIN Driver

Feature	Specification
Document Size:	Max A3 / 11”x17”
Resolution:	Scanner: 600dpi Driver: Binary-1,200dpi, 256 level-1,200dpi
Greyscale:	256 level
OS:	Win95/98/ME, WinNT4.0/2000, Win XP, Win Sever2003
Memory:	Minimum required memory for OS + 8MB
CPU:	Pentium 75MHz or more, or minimum required CPU for OS
HDD:	More than 100MB of disk space is required
Network:	Protocol: TCP/IP
Duplex Scanning:	Yes (with ARDF)
Skew Correction:	Yes
Image Rotation:	Yes
Soft Endorser:	Yes

Fax

General Specification

Feature	Specification	
Circuit:	PSTN, PBX	
Compatibility:	ITU-T (CCITT) G3, Additional G3 (option),	
Resolution:	8 x 3.85 line/mm, 200 x 100dpi (std.), 8 x 7.7 line/mm, 200 x 200dpi (std.), 8 x 15.4 line/mm, 16 x 15.4 line/mm, 400 x 400dpi (with optional SAF memory)	
Compression method:	MH, MR, MMR, JBIG	
Scanning speed:	Standard/Detail mode: 0.43sec Super Fine mode: 0.86sec	
Number of Pages Scanned: **(DF Used)**	A4/LT SEF	Standard mode: 40 cpm Detail mode: 40cpm Super Fine mode: 29 cpm
	A4/LT LEF/image rotation	Standard mode: 46 cpm Detail mode: 46 cpm Super Fine mode: 19 cpm
Modem speed:	33.6K – 2,400bps (G3, Standard with Automatic Shift Down) (33600, 31200, 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, 2400 bps)	
Transmission speed:	G3: Approx.2 seconds (200x100 dpi, JBIG, ITUT #1 chart TTI off, memory transmission) G3: Approx.3 seconds (200x100dpi, MMR, ITUT #1 chart, TTI off, memory transmission)	
SAF Memory Size:	Standard	4MB (Approx.320 pages)
	With Optional SAF Memory	28MB (Approx. 2,240 pages)
Page Memory Size:	Standard	8MB
	With Optional SAF Memory	16MB
	Option: 32MB SD-RAM (24MB SAF Memory + 8MB Page Memory)	
Memory backup:	One hour	
Smoothing:	Standard	
TTI/RTI:	Standard	
CSI:	Standard	

General Specification (Cont'd)

Feature	Specification
Quick dial/ Speed dial:	Standard: 2,000 numbers
Group dial:	Standard: 100 groups (500 numbers per 1 group)
Program:	Standard: 100 numbers
Redial:	Standard
AI Memory dial:	Standard
Direct fax number entry:	Standard
Dual access:	Standard
User Code:	Std. 100 Codes (Max. 500 codes with optional "User Account Enhance Unit")
Auto document:	Standard: 6 documents
Page counter:	Standard
Auto reduction:	Standard
Wild cards:	Standard
Summer time (day light saving time):	No
ID code programming:	Standard (4 digits)
Programming by OMR:	No
User function key:	Standard (3 keys)
Night timer:	No
Energy saver:	Standard
LCD prompt:	Standard
Remaining memory indication:	Standard
clock adjustment:	Standard
Memory file transfer:	Standard

Transmission Specification

Feature	Specification
Immediate transmission:	Standard
Memory transmission:	Standard
Serial broadcasting	Standard (Max. 500 numbers)
Send later:	Standard
Error correction mode:	Standard
Page retransmission:	Standard
Economy transmission:	Standard (Default: 23:00)
Forwarding:	Standard
Batch transmission:	Standard
Image rotation:	Standard
Book fax:	Standard
Closed network (transmission):	Standard
Confidential transmission/with ID:	Standard
Transfer transmission:	Standard
Multi-step Transfer:	Standard
Polling transmission:	Standard
Double sided transmission:	Yes
Transmission reserve:	No

Reception Specification

Feature	Specification
Automatic reception:	Standard
Manual reception:	Standard
Substitute reception:	Standard
Authorized reception:	Standard
Multi-copy:	Standard
Reverse order printing:	Yes
Confidential reception:	Standard
Closed network:	Standard
Polling reception:	Standard
Poll later:	Standard
Polling from memory:	Standard
Multi-polling reception:	Standard

Reception Specification (Cont'd)

Feature	Specification
Continuous polling:	Standard
Reception time printing:	Standard
Center mark:	Standard
Checkered mark:	Standard
2 in 1 (two in one):	Standard
Economy printing mode:	No
Duplex reception:	Yes with option

Internet Fax Basic Specification

Feature	Specification
Requirement of Mainframe:	G3 fax option is required. Printer Scanner option is required.
Number of Address:	2,000 HDD storage
E-mail Address Input:	From LCD operation panel, Web Image Monitor, Smart Device Monitor
Attention:	"to" or "bcc" (select only one), max 500 attentions
Destination Combination:	Internet Fax + G3 Fax, Internet Fax to PC + G3 Fax
Network:	LAN: Local Area Network Ethernet/10Base-T, 100Base-TX, IEEE1394(IP over 1394), IEEE802.11b(wireless LAN)
Transmit function:	E-mail
Scan line density:	200 x 100 dpi(Standard character), 200 x 200 dpi(Detail character), 200 x 400 dpi(Fine character: optional) *1 , 400 x 400 dpi(Super Fine character: optional) *1
Original size: Scanning width:	A3 *1, B4 *1, A4
Communication Protocols:	● Transmission - SMTP, TCP/IP ● Reception - POP3, SMTP, IMAP4, TCP/IP
E-mail format:	Single/Multi-part, MIME Conversion Attached file forms: TIFF-F(MH, MR *1, MMR*1 compression)
Authentication method:	SMTP-AUTH, POP before SMTP, A-POP
Internet communication:	Send and receive e-mail with a computer that has an e-mail address
E-mail send functions:	Automatic conversion of sent documents to e-mail format and e-m transmission. Memory transmission only.
E-mail receive functions:	Automatic detection and printing of appended TIFF-F(MH) files and ASCII text. Memory reception only.

*1 Full mode

LAN Fax Basic Specification

Feature	Specification
Paper Size:	A3, DLT, B4, A4, Letter, Legal, B5, A5
Resolution:	-Super Fine (400 x 400 dpi) -Detail (200 x 200 dpi) *default -Standard (200 x 100 dpi)
Gray Scale:	-Off -On normal *default -On lighter
Number of Address:	500
OS:	Windows 95/98, Windows Me, Windows NT4.0, Windows2000, Windows XP
Memory	Minimum required for each OS
CPU	Minimum required for each OS
HDD	Minimum required for each OS

IP-Fax Specification

Feature	Specification
Network:	LAN: Local Area Network Ethernet/10base-T, 100base-TX, IEEE1394(IP over 1394), IEEE802.11b(wireless LAN)
Scan line density:	8 x 3.85 lines/mm, 200 x 100 dpi(Standard character), 8 x 7.7 lines/mm, 200 x 200 dpi(Details character), 8 x 15.4 lines/mm 200 x 400 dpi (Fine character: optional expansion memory required), 16 x 15.4 lines/mm, 400 x 400 dpi(Super Fine character: optional expansion memory required)
Original size:	Maximum A3 or 11” x 17” (DLT)
Maximum scanning size:	Standard: A3, 297mm x 432mm, Irregular: 297mm x 1200mm
Transmission protocol:	Recommended: T.38 Annex, TCP, UDP/IP communication, SIP(RFC 3261 compliant), H.323 v2
Compatible machines:	IP-Fax compatible machines
IP-Fax transmission function:	Specify an IP address and send faxes to an IP-Fax compatible fax through a network. Also capable of sending faxes from a G3 fax connected to a telephone line via a VoIP gateway.
IP-Fax reception function:	Receive faxes sent from an IP-Fax compatible fax through a network. Also capable of receiving faxes from a G3 fax connected to a telephone line via a VoIP gateway

ENVIRONMENTAL SPECIFICATIONS

Mechanical Noise Level (power level)

Sound Power Level:

	Copier Only		Full System	
	IS2235	IS2245	IS2235	IS2245
Stand-by	34dB	34dB	34dB	34dB
Copying	65dB	67dB	65dB	67dB

Note: Full System includes Mainframe, Finisher & LCT

Sound Pressure Level:

	Copier Only		Full System	
	IS2235	IS2245	IS2235	IS2245
Stand-by	20dB	22dB	20dB	22dB
Copying	49dB	51dB	49dB	51dB

Note: Full System includes Mainframe, Finisher & LCT

Ozone/Dust/Styrene Emission Level

	Target (mg/m^3)
Ozone Emission	Less than 0.02mg/m3
Dust	Less than 0.075mg/m3
Styrene Emission	Less than 0.07mg/m3

Identification of Plastic Components

TBA

Environmental Regulation

	BAM	Energy Star	Swan
Target	Aug-Dec 2005	Yes	No

Power Consumption

	Copier Only		Copier with Printer/Scanner & Fax	
	IS2235	IS2245	IS2235	IS2245
Low Power Mode	126 W	138 W	130 W	149 W
Auto Off Mode	1.2 W	1.2 W	8.5 W	8.5 W

Reduction of Environmentally Sensitive Materials

TBA

Transport & Storage Conditions

	Storage	Transportation
Mainframe	-30 ~ 40°C *1 15% ~ 95%RH *2 Storage period from production date (unopened): 12 months	-30 ~ 50°C *1 Less than 80%RH *2
Toner	Under 35°C 15% ~ 80%RH Storage period from production date (unopened): 24 months *3	Under 35°C
Developer	Under 35 °C 15% ~ 80%RH Storage period from production date (unopened): 24 months	Under 35 °C 15% ~ 80%RH

*1: When stored or transported under 0°C, temperature conditions must be higher than outside air temperature.
*2: Please avoid the direct sunlight when stored or transported.
*3: Toner can be kept in good condition for 30 days under 40°C, and for 12 hours under 50°C.

PART NO.S & COMPATIBILITY

ITEM NAME		STATUS	COMMON WITH	PART NO.
IS 2235		**New**		890 101 24
IS 2245		**New**		890 101 25
OPTIONS				
Platen Cover Type 3800C		Current	IS 2135-45	890 300 03
DF82		Current	ISC2428-35-45	890 202 45
Printer/Scanner Controller Type 3045		**New**		890 303 61
Scanner Accessibility Unit Type 3045		**New**		890 303 70
Fax Option Type 3045		**New**		890 303 62
32MB Fax SAF Memory Type B		Current	ISC2428-35-45	889 983 51
G3 Option Type 3045		**New**		890 303 63
PS530 - Paper Bank		Current	IS 2135-45	890 201 43
RT45 - LCT		Current	IS 2135-45	890 201 44
PT330 - Inner 1 Bin Tray		Current	IS 2135-45	890 302 05
SR790 - 1000 Sheet Finisher		Current	IS 2135-45	890 200 76
SR880 - Multi Tray Finisher		Current	IS 2135-45	890 201 41
SR890 - Booklet Finisher		Current	IS 2135-45	890 201 42
Bridge Unit Type 2045		Current	IS 2135-45	890 201 46
Punch Kit 2/4 Type 1045		Current	IS 2135-45	890 300 46
Punch Kit 4 Type 1045		Current	IS 2135-45	890 300 47
Fax Marker Type 30		Current	IS 2135-45	885 967 88
Copy Data Security Type A/3045		**New**		890 303 69
Firewire IEEE 1394 I/F Board Type B		Current	ISC 1024c/32c	890 301 96
IEEE 1284 Interface Unit Type A		Current	ISC 1024c/32c	890 302 77
Wireless LAN IEEE802.11b Type H		Current	ISC2428-35-45	890 303 40
Bluetooth Interface Unit Type 3245		Current	ISC2428-35-45	890 303 21
Cabinet		**New**		890 303 79
Key Counter Type H		Current	IS 2135-45	889 987 62
PostScript3 Unit Type 3045		**New**		890 303 64
256 MB Memory Type E		Current	IPC 2525-e	890 303 41
NV RAM Type E		Current	IPC 2525-e	890 303 44
File Format Converter Type B		Current	ISC 1024c/32c	890 201 62
DataOverSecurity Unit Type D		Current	ISC2428-35-45	890 303 20
OPERATIONAL INSTRUCTIONS				
English		**New**		890 516 73
German		**New**		890 516 74
French		**New**		890 516 75
Italian		**New**		890 516 76
Spanish		**New**		890 516 77
Dutch		**New**		890 516 78
Swedish		**New**		890 516 79
Norwegian		**New**		890 516 80
Danish		**New**		890 516 81
Finnish		**New**		890 516 82
Portuguese		**New**		890 516 83
Czech		**New**		890 516 84
Hungarian		**New**		890 516 85
Polish		**New**		890 516 86
Russian		**New**		890 516 87
CONSUMABLES	**Yield**			
Toner Black Type 2045	30K	Current	IS 2135-45	890 400 75
Developer Black Type 2045	300K	Current	IS 2135-45	890 400 74
OPC Drum 43/II	150K	Current	IS 2135-45	885 982 17
Staples VI (for SR890)	4x2K	Current	IS 2135-45	885 973 93
Staples IX (SR890 booklet)	1x5K	Current	IS 2135-45	885 983 46
Staples XI/2 (SR790/880)	1x5K	Current	IS 2135-45	885 958 18
Staples XI/2 Refill (SR790/880)	3x5K	Current	IS 2135-45	885 958 19

Danka Office Products BV
Suite 108, Kinetic Centre, Theobald Street, Borehamwood, Hertfordshire, WD6 4PJ
Tel: 0208 387 5410 Fax: 0208 387 5411
Email: hwellington@infotecdealer.co.uk
www.infotec-dealer.com